DOCUMENT RESUME

ED 158 653 HE 010 349

AUTHOR Minter, W. John; Bowen, Howard R.

TITLE Independent Higher Education. Fourth Annual Report on Financial and Educational Trends in the Independent Sector of American Higher Education.
INSTITUTION National Association of Independent Colleges and Universities, Washington, D.C.
SPONS AGENCY Lilly Endowment, Inc., Indianapolis, Ind.
PUB DATE Jul 78
NOTE 207p.
AVAILABLE FROM National Association of Independent Colleges and Universities, 1717 Massachusetts Avenue, N.W., Washington, D.C. 20036

EDRS PRICE MF-$0.83 HC-$11.37 Plus Postage.
DESCRIPTORS Administrative Personnel; *Annual Reports; College Faculty; Economic Status; *Educational Finance; *Educational Quality; Enrollment Trends; *Financial Problems; *Higher Education; Income; Junior Colleges; National Surveys; Nonprofessional Personnel; Operating Expenses; *Private Colleges; Retrenchment; Student Financial Aid; Tables (Data)

ABSTRACT

A report on the condition of the independent sector of American higher education systematically analyzes the fiscal condition of these institutions in terms of their ability to maintain the integrity and quality of their programs. The report is based on information gathered from a representative sample of 135 independent, non-profit, accredited institutions, including two-year colleges and research universities, but not autonomous professional schools. The question addressed is: In what ways are independent colleges and universities gaining ground, holding their own, or losing ground? Some of the topics discussed in this context are: enrollment and admissions; faculty and other staff; content and quality of educational programs; operating revenues and expenditures; undergraduate student financial aid, including an analysis of the impact of financial aid payments upon the fiscal condition of the independent sector; assets, liabilities, and net worth; financial ratios; the condition of institutions individually; and observations on retrenchment and quality. The statistical information and analyses are carried through the year 1976-77 and for some data through 1977-78, with much of this data organized in tables. Additional tables are included in the first appendix. "Definitions of Financial Terms" and "Institutional Financial Position and Methodology in the Appraisal of Progress" are also appended. (JMD)

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ED158653

INDEPENDENT HIGHER EDUCATION

Fourth Annual Report

on

Financial and Educational Trends in the Independent Sector of American Higher Education

1978

by

W. John Minter and Howard R. Bowen

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

National Association of Independent Colleges and Universities

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NATIONAL ASSOCIATION OF INDEPENDENT
COLLEGES AND UNIVERSITIES

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FOREWORD

It is a special pleasure for me to introduce this year's edition of "Financial and Educational Trends in the Independent Sector of American Higher Education" because this is the first of these reports to be published under the auspices of the National Association of Independent Colleges and Universities (NAICU), and its new sister organization, the National Institute of Independent Colleges and Universities (NIICU).

NAICU was founded in 1976 to serve as "the unified national voice of independent higher education," with primary emphasis on the public policy concerns and interests of independent higher education at the federal level. To be successful in carrying out this central mission, NAICU needs continuing assessments of the actual condition of the independent sector on a systematic and objective basis, as best exemplified in the reports prepared in each of the last three years by W. John Minter and Howard R. Bowen under the auspices of the Association of American Colleges. We were therefore most gratified when the Lilly Endowment, Inc., awarded a generous grant to NAICU which made it possible to continue, expand and refine the Minter-Bowen report for a fourth year, under NAICU/NIICU auspices.

The Lilly grant has enabled the authors to expand their sample of independent colleges and universities to include two major groups which were previously unrepresented -- major research universities and two-year colleges. With the expanded sample, this year's report provides a much more comprehensive and balanced picture of financial and educational trends throughout the entire independent sector than could be obtained in the three previous reports. In addition, the authors also have included an expanded analysis of the impact of student financial aid payments upon the fiscal condition of independent colleges and universities, a matter which is critically important to public policy discussions at both the federal and state levels, particularly in connection with the upcoming Congressional review of the Higher Education Act.

Expansion of the sample has not disturbed the attention to long-term financial and educational trends throughout the independent sector because the authors have taken pains to incorporate prior-year as well as current-year data for the institutions added to the sample, thus providing a complete four-year data base for all 135 institutions included in the sample. Further, this year's report endeavors for the first time to systematically analyze the fiscal condition of independent institutions in terms of their ability to maintain the integrity of their educational missions and the quality of their educational programs.

This fourth report establishes a solid data base which accurately represents the entire independent sector of American higher education. We intend to maintain and update that data base each year, because of its usefulness in assessing the impact of various public policy proposals on independent colleges and universities. But henceforward, our plan is to publish the Minter-Bowen reports bienially instead of annually. The next report is scheduled for publication in 1980, reflecting a six-year data base through 1978-79.

On behalf of the NAICU/NIICU membership and Board of Directors, I want to express sincere appreciation to W. John Minter and Howard R. Bowen for the continuing brilliance and objectivity of their contributions to public understanding of independent higher education, to the members of their advisory group who have helped to shape the analysis, and to the Lilly Endowment, Inc., which provided the financial support required to produce this uniquely incisive report.

John D. Phillips
President, NAICU/NIICU

PREFACE

This report is the fourth of an annual series on financial and educational trends in the independent (or non-public) sector of American higher education. The purpose of the series is to monitor the progress of independent colleges and universities regularly and to provide reliable and timely information for the use of government officials, educators, donors, students, faculty, and other persons or groups interested in independent higher education. The study is sponsored by the National Association of Independent Colleges and Universities and financed by a grant from the Lilly Endowment, Inc.

The first three reports covered the period 1969-70 through 1975-76. In this report, the statistical series and analysis are carried forward through the year 1976-77 and for some data through 1977-78.

In this report, there is an important improvement in coverage as compared with the preceding three documents. Previously, the study was based on a stratified sample of 100 institutions representing all parts of the independent sector except two-year colleges, research universities, and autonomous professional schools (such as theological seminaries and music conservatories). The sample in this fourth study has been enlarged to include research universities and two-year colleges. The only part of the independent sector now omitted is the autonomous professional schools. The sample now comprises 135 institutions representing a universe of 1,157 institutions.

The participating institutions have been superbly cooperative in supplying the basic data year after year. The exceptionally high rate of response is gratifying and greatly appreciated.

The sponsorship of the study has changed this year. Previously the sponsor was the Association of American Colleges. As a result of a change in the mission of AAC and the establishment of the new National Association of Independent Colleges and Universities, having responsibilities relating primarily to fiscal matters, it was deemed advisable by all parties concerned to transfer the study to the new NAICU. The transfer was made with full cooperation all around. This change did result in one important semantic change. In previous reports, the sector of higher education under review was called "the private sector." In this report it is called "the independent sector." No significance whatever attached to this change. Both words--"private" and "independent"--are meant to be interchangeable, that is, to refer to colleges and universities not under public sponsorship.

The following persons or organizations have been supportive and helpful in many ways: John D. Phillips of the National Association of

Independent Colleges and Universities; the officers of the Lilly Endowment; Kathleen Conger, Bonnie Hoopes, and Lynn Parsons of Boulder, Colorado who had major roles in the gathering and analysis of the statistics; and Janet Tanner and Dorothy Pearson of Claremont who assisted in the preparation of the manuscript.

The study was designed and executed in consultation with an Advisory Committee whose suggestions and criticisms were extraordinarily helpful. The members of this Committee are:

Earl F. Cheit, University of California, Berkeley
Richard M. Cyert, Carnegie-Mellon University
Virginia Fadil, National Association of Independent Colleges and Universities
Peggy Heim, Teachers Insurance and Annuity Association and College Retirement Equities Fund
Hans H. Jenny, College of Wooster
Sterling M. McMurrin, University of Utah
Morgan Odell, Association of Independent California Colleges and Universities
Sidney A. Rand, St. Olaf College
William A. Shoemaker, Council for the Advancement of Small Colleges
Richard M. Witter, National Council of Independent Junior Colleges.

Having made these acknowledgments, the full responsibility for the report rests with the undersigned.

W. John Minter

Howard R. Bowen

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CHAPTER I

INTRODUCTION

This report is the fourth in an annual series on the financial and educational condition of the independent sector of American higher education. It is a continuation of the previous reports but differs from them in that for the first time, research universities and two-year colleges have been included in the sample of institutions under study. The measures used to assess financial and educational condition remain substantially the same but with refinements in financial trend analysis.

The series is based on the conviction that independent higher education is an important--even indispensable--part of the American higher educational system. It adds diversity, it offers competition to an otherwise all-encompassing public system, it provides a center of academic freedom removed from political influence, it is deeply committed to liberal learning, it is concerned for human scale and individual personality, it sets standards, it provides educational leadership, and it saves money for taxpayers. Not every private college or university achieves all of these results, but enough institutions do achieve some of them to make survival of a strong independent sector a major goal in the broad public interest.

Despite its acknowledged achievements, the independent sector is widely believed to be in serious jeopardy. There are many reports that it faces increasing competition from hundreds of new public institutions; that it has had to raise tuitions substantially year after year so that the tuition gap between independent and public institutions has widened; that its income from gifts and endowments has not kept pace with rising costs; and that the pool of available students is contracting. It is often asserted that these circumstances threaten to destroy some independent colleges and universities, to drive some into the public sector, and to weaken most.

Given the social importance and vulnerability of the independent sector, it has become an object of deep concern not only for its private donors and sponsors but also for state and federal governments. Many states have acted on behalf of the independent colleges and universities within their borders and the federal government is showing increasing interest. Also, many of the independent institutions have themselves taken steps to strengthen their position through improved management, budgetary adjustments, and application of increased effort. Nevertheless, the concern remains. Under these conditions, it is a matter of considerable importance to have an early warning system consisting of reliable and up-to-date information about the independent sector.

Scope and Method

The study is limited to accredited, independent, non-profit, four-year institutions of higher education of the following types (as defined by the Carnegie Commission on Higher Education):[1]

1. Research Universities I (awarded at least 50 Ph.D.s in 1969-70 and included among the leading 50 universities in financial support of academic science).

   Research Universities II (awarded at least 50 Ph.D.s in 1969-70 and included among the leading 100 universities in financial support of academic science).

2. Doctoral-granting Universities I (awarded 40 or more Ph.D.s in 1969-70 or received at least $3 million in federal funds, and

   Doctoral-granting Universities II (awarded at least 10 Ph.D.s in 1969-70).

3. Comprehensive Universities and Colleges I (enrolled more than 2,000 students and offered a liberal arts program and at least two professional programs) and

   Comprehensive Universities and Colleges II (enrolled more than 1,500 students and offered a liberal arts program and at least one professional program).

4. Liberal Arts Colleges I (selective in admissions standards or among leading institutions in number of graduates later receiving Ph.D.s).

5. Liberal Arts Colleges II (all other liberal arts colleges).

6. Two-year Colleges.

These six types include 1157 institutions serving about 1,969,700 students in 1970. They represent 76 percent of the institutions and 92 percent of the enrollment in the independent sector.

The excluded types of institutions are specialized professional schools (such as music conservatories and theological seminaries). These were not included because of special issues and problems requiring detailed study beyond the limits of available resources.

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[1] A Classification of Institutions of Higher Education (Berkeley: Carnegie Commission on Higher Education, 1973). A new edition of this report has recently been published by the Carnegie Council on Policy Studies in Higher Education. For reasons relating to continuity of the sample, we have continued to use the earlier edition.

The study is based on a sample of 135 institutions representing 11.7 percent of the 1157 institutions in the population. The sample was drawn to insure representation of the several types of institutions, of four broad regions of the country, and of institutions of various sizes as measured by enrollment.[1] The participating institutions are listed at the end of this chapter.

The participating institutions are requested annually to submit copies of the following documents:

Higher Education General Information Survey (HEGIS)
Enrollment, Salaries, Finance

Salary information as submitted to AAUP

Audited financial statement and supporting schedules

Voluntary support survey

In addition, each is asked each year to respond to a questionnaire, parts of it to be filled out by the director of admissions, chief student aid officer, chief academic officer, housing director, chief financial officer, a senior faculty member, and president or chancellor.

The study is based primarily on the tabulation and analysis of these documents. As would be expected, the rate of response has varied for different documents and different questions. For some items, particularly financial and enrollment data, the response has been almost perfect. For some other items, the response has been less but nevertheless remarkably good--in almost all cases above 70 percent. In our judgment, the data are dependable.

In the analysis of the data, emphasis is given to indicators reflecting changes over time in the condition of the independent sector. The basic question to be answered is: In what ways are the independent colleges and universities gaining ground, holding their own, or losing ground? The analysis is in three parts: (1) consolidated trends for all institutions; (2) comparative trends for different types of institutions; and (3) estimates of the overall condition of each institution included in the sample.

The data derived from the sample for any given type of institution are weighted to produce reasonably reliable estimates for the total population of independent institutions of all kinds. Six sets of weights are used, each applied to a particular kind of data as follows:

---

[1] An alternate for each sample institution was also drawn. For the few institutions which declined to participate, the alternate institutions were included.

Data pertaining to:	Weighting factor:
Students	enrollments (full-time equivalent)
Faculty	number of faculty (full-time equivalent)
Administrative and general service staff	number of employees (full-time equivalent)
Revenues and expenditures	total expenditures
Assets and liabilities	total assets
Opinions	number of institutions

The actual numerical weights are presented in the tabulation on page 5.

As can be readily seen, there are considerable differences in the distribution of the several weights among the six types of institutions. For example, with respect to assets and expenditures, the Research Universities are overwhelming; with respect to number of institutions, the Liberal Arts Colleges II are dominant, etc.

These weights are important primarily in calculating the aggregate figures for all six types of institutions combined. Such aggregate figures are usually intended to describe the experience or behavior of the entire independent sector of higher education taken as a whole. These weights are important to produce adequate aggregate data. Many readers will find separate data for the several types of institutions more interesting than the aggregate data. Weighting has no influence on the separate data for each institutional type.

The data are frequently expressed as index numbers. An index number simply expresses the percentage relationship between a datum for a given year and the corresponding datum for the base year. For example, if total expenditures of Liberal Arts Colleges II in 1969-70 were $10 million and in 1974-75 were $15 million, the index numbers would be 100 for 1969-70 and 150 for 1974-75. On the basis of these numbers one could say that expenditures had increased 50 percent over the period from 1969-70 to 1974-75.

The sources of financial data for this survey are audited financial statements and supporting schedules supplied by the institutions. These statements have been revised to meet standard definitions established by the American Institute of Certified Public Accountants and the National Association of College and University Business Officers. During the revision, the study staff has been in contact with the financial officers of the institutions to clear up ambiguities or to obtain missing data. The finally revised documents have been verified by the financial officers of the reporting institutions.

Weighting Factor	Research Universities	Doctoral-Granting Universities	Comprehensive Universities and Colleges	Liberal Arts Colleges I	Liberal Arts Colleges II	Two-Year Colleges	Total
Enrollments	.186	.159	.265	.091	.237	.062	1.000
Number of Faculty	.322	.161	.177	.090	.204	.046	1.000
Number of Administrative and General Service Staff	.484	.197	.136	.066	.100	.018	1.000
Total Expenditures	.590	.164	.074	.066	.081	.025	1.000
Total Assets	.617	.132	.062	.094	.073	.023	1.000
Number of Institutions	.030	.026	.125	.125	.472	.221	1.000

List of Institutions in Sample

Research Universities

Brandeis University - MA
Catholic University - DC
Harvard University - MA
Johns Hopkins University - MD
University of Pennsylvania - PA
Princeton University - NJ
Rice University - TX
University of Southern California-CA
Tulane University - LA
Washington University - MO
Yale University - CT

Doctoral-Granting Universities

Adelphi University - NY
Dartmouth College - NH
University of Denver - CO
Drexel University - PA
Georgetown University - DC
Marquette University - WI
University of Notre Dame - IN
University of the Pacific - CA
Southern Methodist University - TX
University of Tulsa - OK

Comprehensive Universities and Colleges

Abilene Christian College - TX
University of Albuquerque - NM
Baldwin-Wallace College - OH
Capital University - OH
University of Dayton - OH
Drake University - IA
Elmira College - NY
Fairleigh Dickinson University - N.J.
Geneva College - PA
Gonzaga University - WA
University of Hartford - CT
Iona College - N.Y.
Lafayette College - PA
Merrimack College - MA
Oklahoma Baptist University - OK
Ouachita Baptist University - AR
Pacific Lutheran University - WA
University of Puget Sound - WA
Roger Williams College - R.I.
Russell Sage College - N.Y.
St. Lawrence University - N.Y.
St. Norbert College - WI
University of Santa Clara - CA
Seton Hall University - N.J.
Simmons College - MA
Suffolk University - MA
Texas Wesleyan College - TX
Trinity University - TX
Tri-State College - IN
Union College - N.Y.
Valparaiso University - IN
Villanova University - PA

Liberal Arts Colleges I

Allegheny College - PA
Augustana College - IL
Carleton College - MN
Colorado College - CO
Davidson College - N.C.
Hamilton College - N.Y.
Kalamazoo College - MI
Kenyon College - OH
Macalester College - MN
Mt. Holyoke College - MA
College of New Rochelle - N.Y.
Oberlin College - OH
Randolph-Macon Woman's College - VA
Reed College - OR
Ripon College - WI
Rosemont College - PA
St. Olaf College - MN
Salem College - N.C.
Washington and Lee University - VA
Wells College - N.Y.
Westminster College - MO
Wheaton College - MA
Whitman College - WA
Williams College - MA

Liberal Arts Colleges II

Belmont Abbey College - N.C.
Bennett College - N.C.
Berry College - GA
Bethel College - KS
Bryan College - TN
Campbell College - N.C.
Clark College - GA
Curry College - MA
Dominican College of Blauvelt - N.Y.
Elmhurst College - IL
Fisk University - TN
George Fox College - OR
Marian College of Fond du Lac - WI
Meredith College - N.C.
Miles College - AL
Milligan College - TN
Millsaps College - MS
North Central College - IL
Northwestern College - IA
Paine College - GA
Presbyterian College - S.C.
Paul Quinn College - TX
Regis College - CO
Rivier College - N.H.
Rust College - MS
St. Paul's College - VA
Shaw University - N.C.
Stephens College - MO
Talladega College - AL
Tarkio College - MO
Unity College - ME
Upsala College - N.J.
Westmont College - CA
Wilmington College - OH

Two-Year Colleges

Becker Junior College - MA
Central College - KS
Central YMCA Community College - IL
Concordia College - OR
Dean Junior College - MA
Hannibal-LaGrange College - MO
Hesston College - KS
Keystone Junior College - PA
Lees Junior College - KY
Lon Morris College - TX
Missouri Baptist College - MO
Mt. Saint Clare College - IA
Northeastern Christian Junior College - PA
Pierce Junior College - PA
Reinhardt College - GA
Ricks College - ID
St. Catherine College - KY
Southern Baptist College - AR
Waldorf College p IA
Wesley College - DE
Wood Junior College - MS
Young Harris College - GA

CHAPTER II

ENROLLMENT AND ADMISSIONS

Perhaps the most conspicuous mark of a healthy college or university is the capacity to attract and hold students. Among the most important indicators signaling impending or actual distress are declining numbers of applicants, increasing student attrition, and declining enrollments. In this chapter we review trends in admissions, attrition, and enrollments over the period 1969-70 to 1977-78.

Enrollment

As shown in table 1, total enrollments in independent colleges and universities have exhibited a slow upward trend which continued in 1977-78. There have been decreases during particular years for the Comprehensive Universities and Colleges, Liberal Arts Colleges II, and the two-year colleges but the underlying trend has been slowly upward for all types of institutions. The stable slow growth of independent college enrollments is due in part to the practice in many institutions of setting ceilings on numbers of students--thus avoiding large increases --and of intensifying recruitment efforts in case enrollment falls short of expectations--thus avoiding large decreases. The relative stability of total enrollment, however, conceals considerable fluctuation from year to year in the "mix" of students (see table 1). In general, the trend has been toward an increasing proportion of graduate, professional, and other (mainly non-degree part-time) students, and a decreasing proportion of regular full-time undergraduate students.

Admissions

The admissions situation for undergraduate students changed very little in 1977-78 (see table 2). The numbers of new students actually enrolled remained about constant. However, the number of applications received and the number of applicants offered admission increased perceptibly. This would suggest either that more applicants were needed in relation to the number of students actually enrolled or that the institutions could afford to be a bit more selective than formerly. We suspect that the upturn in applications and offers of admission, as shown in table 2, may be a mildly favorable sign indicating a slightly stronger position in student recruitment.

TABLE 1

OPENING FALL ENROLLMENT, FULL-TIME EQUIVALENTS, BY TYPE OF INSTITUTION,
1969-70 to 1977-78[1]
(Index Numbers: 1969-70 = 100)

	AUTUMN								
	1969	1970	1971	1972	1973	1974	1975	1976	1977
Five Types of Institutions Combined:									
Freshmen and Sophomores	100	103	105	103	102	103	106	107	108
Juniors and Seniors	100	101	104	105	103	103	107	109	109
Sub-total: Undergraduates	100	102	105	104	103	103	106	108	109
Graduate Students	100	101	99	98	103	103	107	105	106
Professional Students	100	121	132	148	155	156	165	165	178
Other	100	119	110	91	91	97	127	90	119
Sub-total: Graduates, Professional, Other	100	106	105	107	112	115	125	119	128
Grand Total: All Students	100	102	106	106	106	107	111	111	113
Research and Doctoral Universities:									
Freshmen and Sophomores	100	101	102	103	105	108	110	110	111
Juniors and Seniors	100	101	100	104	101	102	111	119	120
Sub-total: Undergraduates	100	101	101	103	103	104	109	113	114
Graduate Students	100	99	94	94	97	97	100	100	99
Professional Students	100	123	128	148	153	165	166	166	185
Other	100	119	122	99	90	97	131	68	94
Sub-total: Graduates, Professional, Other	100	104	102	106	109	112	122	117	126
Grand Total: All Students	100	102	103	106	107	109	113	114	116
Comprehensive Universities and Colleges:									
Freshmen and Sophomores	100	105	106	101	96	96	97	97	101
Juniors and Seniors	100	102	106	105	102	101	101	98	98
Sub-total: Undergraduates	100	103	106	103	99	98	99	98	100
Graduate Students	100	107	131	123	139	137	140	123	140
Professional Students	100	119	163	171	198	208	214	216	217
Other	100	99	82	92	114	91	114	114	137
Sub-total: Graduates, Professional, Other	100	108	125	128	149	144	154	145	159
Grand Total: All Students	100	104	110	108	107	106	109	106	110

TABLE 1 (Continued)

	AUTUMN								
	1969	1970	1971	1972	1973	1974	1975	1976	1977
Liberal Arts Colleges I:									
Freshmen and Sophomores	100	103	104	105	107	108	109	113	116
Juniors and Seniors	100	100	103	108	111	112	116	117	118
Sub-total: Undergraduates	100	102	104	107	109	110	112	115	117
Graduates, Professional, Other	100	122	167	135	136	137	144	136	138
Grand Total: All Students	100	103	106	109	110	111	113	115	117
Liberal Arts Colleges II:									
Freshmen and Sophomores	100	102	105	99	98	99	101	101	101
Juniors and Seniors	100	100	105	106	102	103	104	104	104
Sub-total: Undergraduates	100	101	105	102	101	101	102	102	102
Graduates, Professional, Other	100	93	113	110	145	191	266	279	329
Grand Total: All Students	100	100	103	101	100	101	104	105	106
Two-Year Colleges:									
Grand Total	100	110	118	119	118	118	128	129	132

[1]Based on returns from 119 of 135 institutions.

TABLE 2

RECRUITMENT AND ADMISSION OF UNDERGRADUATE STUDENTS,
1973-74 THROUGH 1977-78,
FIVE TYPES OF INSTITUTIONS COMBINED[1]

	AUTUMN				
	1973-1974	1974-1975	1975-1976	1976-1977	1977-1978
1. Number of completed applications received for admission to freshmen class	100	102	105	108	113
2. Number of applicants offered admission to the freshmen class	100	101	102	104	107
3. Number of full-time equivalent new freshmen actually enrolled	100	100	103	102	103
4. Number of full-time equivalent new undergraduate transfer students actually enrolled	100	96	102	100	101
5. Number of full-time equivalent new undergraduate students, freshman and transfer, actually enrolled	100	99	103	103	103
6. Offers of admission to the freshmen class as percentage of completed applications received	88%	89%	88%	87%	90%
7. Entering freshmen as percentage of admissions offered	63%	63%	64%	64%	63%
8. Average Combined Scholastic Aptitude Test (SAT) Scores of entering freshmen	1019	1018	1010	1008	1007
9. Percentage of entering freshmen by rank in high school class:					
Top fifth	49%	48%	50%	50%	51%
Second fifth	23	23	21	22	22
Third fifth	15	15	15	14	14
Lowest two-fifths	13	14	14	14	13

[1]For detail by types of institutions, see table 3 and Appendix A, tables I through V.

The ability of entering students as measured by rank in high school class improved slightly in 1977-78, especially for the Research and Doctoral-Granting Universities and the Comprehensive Universities and Colleges (table 3). Student ability as measured by SAT scores continued to decline perceptibly in 1977-78 (table 3) but the rate of decline appeared to be less than the rate of decline in these scores nationally (table 4). The trend in SAT scores for the various types of institutions was mixed. Average SAT scores actually increased for the Comprehensive Universities and Colleges and for the Two-Year Colleges, but fell slightly for the other three types of institutions (table 3).

A review of the admissions statistics over the past several years for the five types of institutions (table 3 and Appendix C, tables I through V) indicates that the Liberal Arts Colleges I and II may be just perceptibly losing ground whereas the Two-Year Colleges seem to be showing surprising strength.

An upward trend in the size of admissions staff continued in 1977-78 (table 5). Only the Liberal Arts Colleges I group showed a modest decline. In general, the trend in the ratio of students to admissions staff has moved steadily downward suggesting that in the current student market, recruiting efforts are increasing more rapidly than recruiting results. Competition is keen and recruiting costs continually rise.

Student Attrition

Evidence about attrition is presented in table 6. The percentage of undergraduate students who left college during the years 1974-75 through 1976-77 is one source of data. As the table shows, there was a slight decrease in 1975-76 and no change in 1976-77. Another bit of evidence is the number of new undergraduate students enrolled as a percentage of total undergraduate enrollment. This percentage is a measure of the number of new students needed to maintain a given student body. Again, the data reveal no significant changes. The independent sector continues to hold steady with respect to student dropouts.

Overall Enrollment Situation

The participating institutions were asked if they would have preferred to enroll additional students, and, if so, how many. The responses, presented in table 7, show a relatively stable number of institutions indicating that they would have liked to enroll additional students. The largest relative number answering "yes" was in the Liberal Arts Colleges II. But it appears that in most institutions there was some slack in total enrollment.

Finally, the institutions were asked to forecast their undergraduate enrollment for the next three years (see table 8). The forecast for the five types of institutions combined was a 10 percent increase over the three-year period. The largest increase, 20 percent, was projected by the Research and Doctoral-Granting Universities, while the Liberal Arts Colleges II projected a 5 percent decrease in undergraduate enrollments.

TABLE 3

SCHOLASTIC APTITUDE TEST (SAT) SCORES AND RANK IN HIGH SCHOOL CLASSES, ENTERING FRESHMEN, BY TYPE OF INSTITUTION, 1973-74 TO 1977-78

		Research and Doctoral-Granting Universities	Comprehensive Universities and Colleges	Liberal Arts Colleges I	Liberal Arts Colleges II	Two-Year Colleges	Five types of Institutions Combined
SAT Combined Scores							
1973-74 Autumn		1111	1006	1140	902	826	1019
1974-75 Autumn		1117	1006	1142	890	827	1018
1975-76 Autumn		1099	996	1124	898	828	1010
1976-77 Autumn		1104	995	1122	885	822	1008
1977-78 Autumn		1102	999	1120	878	829	1007
Percentage by Rank in High School Class:							
Top fifth	1973-74	64%	45%	62%	37%	10%	49%
	1974-75	63	45	63	37	10	48
	1975-76	66	44	62	36	10	50
	1976-77	67	42	62	37	15	50
	1977-78	69	44	62	38	12	51
Second fifth	1973-74	20	27	21	26	22	23
	1974-75	21	27	20	24	21	23
	1975-76	19	27	21	22	20	21
	1976-77	19	30	21	22	17	22
	1977-78	18	28	21	22	20	22
Third fifth	1973-74	8	17	10	20	32	15
	1974-75	8	17	10	19	32	15
	1975-76	8	18	10	21	33	15
	1976-77	8	17	9	21	30	14
	1977-78	7	19	9	20	34	14
Bottom two-fifths	1973-74	8	11	7	17	36	13
	1974-75	8	11	7	20	37	14
	1975-76	7	11	7	21	37	14
	1976-77	6	11	8	20	38	14
	1977-78	6	9	8	20	34	13

TABLE 4

NATIONAL AVERAGE SCORES ON SAT COLLEGE ADMISSION TESTS
AS COMPARED WITH AVERAGE SAT SCORES FOR THE
SAMPLE OF INSTITUTIONS INCLUDED IN THIS STUDY

Year in Which Test Administered[1]	SAT Scores National Average Scores	Index[2]	SAT Scores Averages for Sample Scores	Index
1973-74	918	100.0	1019	100.0
1974-75	906	98.7	1018	99.9
1975-76	903	98.4	1010	99.1
1976-77	899	97.9	1008	98.9
1977-78	---	---	1007	98.8

[1] One year before admission to college.

[2] Index Numbers: 1973-74 = 100.

TABLE 5

CHANGES IN THE SIZE OF THE ADMISSIONS STAFF, BY TYPE OF INSTITUTION, 1974-75 TO 1977-78

	Research and Doctoral-Granting Universities	Comprehensive Universities and Colleges	Liberal Arts Colleges I	Liberal Arts Colleges II	Two-Year Colleges	Five Types of Institutions Combined
Index: Number of persons (full-time equivalent) on admissions staff						
1974-75	100	100	100	100	100	100
1975-76	111	116	108	111	106	112
1976-77	110	109	119	111	106	111
1977-78	112	112	117	116	114	113
Ratio between number of new students enrolled and number of persons on admissions staff						
1974-75	95:1	143:1	59:1	71:1	81:1	97:1
1975-76	74:1	127:1	53:1	64:1	88:1	79:1
1976-77	73:1	135:1	46:1	67:1	82:1	79:1
1977-78	72:1	129:1	48:1	62:1	78:1	77:1

TABLE 6

INDICATORS OF STUDENT ATTRITION, BY TYPE OF INSTITUTION,
1974-75 THROUGH 1977-78

	Percentage of Undergraduate Students Leaving College[1] During or at the End of			Number of New Undergraduate Freshmen and Transfer Students Enrolled as Percentage of Total Undergraduate Enrollment			
	1974-75	1975-76	1976-77	1974-75	1975-76	1976-77	1977-78
Research and Doctoral-Granting Universities	6%	5%	5%	31%	31%	29%	29%
Comprehensive Universities and Colleges	15	12	12	34	33	33	34
Liberal Arts Colleges I	11	11	11	32	31	32	31
Liberal Arts Colleges II	19	16	17	39	40	41	42
Two-Year Colleges	--	--	--	75	79	80	81
Five Types of Institutions Combined	12	10	10	37	37	36	37

[1]Not including graduates.

TABLE 7

SHORTFALL IN UNDERGRADUATE ENROLLMENT (FULL TIME EQUIVALENT), 1975-76 THROUGH 1977-78

Responses of Institutions to Question: Would you have preferred to enroll additional students?					For those reporting preference for more students, percentage increase in enrollment that could have been accommodated without significant additions to faculty, housing, classrooms.
	Yes	No	No Answer	Total	
Research and Doctoral-Granting Universities:					
1977-78	10	5	6	21	1%
Comprehensive Universities and Colleges:					
1975-76	20	8	4	32	15
1976-77	19	5	8	32	7
1977-78	20	9	3	32	8
Liberal Arts Colleges I:					
1975-76	13	10	1	24	9
1976-77	11	11	2	24	13
1977-78	11	11	2	24	7
Liberal Arts Colleges II:					
1975-76	24	5	5	34	13
1976-77	28	2	4	34	20
1977-78	24	3	7	34	11
Two-Year Colleges:					
1977-78	16	1	8	25	6
Five Types of Institutions Combined:					
1977-78	81	29	26	136	n.a.

TABLE 8

INSTITUTIONAL PROJECTIONS OF UNDERGRADUATE ENROLLMENT (FULL-TIME EQUIVALENT) BY TYPE OF INSTITUTION (Index Numbers: 1977-78 = 100)

	Actual	Estimated Enrollment		
	1977-78	1978-79	1979-80	1980-81
Five Types of Institutions Combined	100	102	107	110
Research and Doctoral-Granting Universities	100	105	113	120
Comprehensive Universities and Colleges	100	104	108	111
Liberal Arts Colleges I	100	105	111	118
Liberal Arts Colleges II	100	98	96	95
Two-Year Colleges	n.a.	n.a.	n.a.	n.a.

Conclusions

Our study of changes in enrollment and admissions suggests that the independent sector held its own in 1977-78. As in the previous year there were no adverse changes of significance and no great leaps forward.

1. Total enrollments increased by about 2 percent in 1977-78.

2. Admissions data suggest no significant change in 1977-78, certainly no deterioration, in the power of the institutions to attract qualified students.

3. The continuing upward trend in the size of admissions staffs indicates that competition for students is becoming keener year by year; yet the independent sector appears to be able to meet the competition, at least so far.

4. No significant changes were reported in 1977-78 in rates of student attrition.

The overall enrollment situation remains uncertain, particularly in view of the demographic changes due in the 1980s. However, up to 1977-78, the independent sector has on the whole maintained its position in both numbers and academic qualifications of its students. The aggregate figures presented in this chapter, however, obscure wide variations in the experience of individual institutions.

CHAPTER III

FACULTY AND OTHER STAFF

A large proportion of higher educational expenditures are personnel costs. One of the ways institutions may accommodate to changing conditions is to control increases in the payroll. This can be done by adjusting the number of persons employed, compensation rates, or both. In this chapter, we consider changes in the number, compensation, and working conditions of faculty and non-academic staff as possible indicators of the financial circumstances in independent higher education.

Faculty Size

The number of full-time equivalent faculty on the payroll, all ranks, has grown slowly in recent years as shown in table 9. In 1977-78, the rate of growth in number of faculty exceeded ever so slightly the growth rate in enrollment. As a result, the ratio of students to faculty (in full-time equivalents) declined slightly (table 9). One may infer that the number of faculty is about keeping pace with enrollment, and that no retrenchment in number of faculty is taking place.

Faculty Compensation

As shown in tables 9 and 10, average faculty compensation (including salaries and fringe benefits) in the independent sector rose by 6.4 percent in 1977-78, and this almost kept pace with inflation as measured by the Consumer Price Index but fell substantially short of increases in wages and salaries in the economy generally as measured by Average Weekly Earnings in Private Non-agricultural Employment.

A comparison of the level and trends in faculty compensation between public and independent institutions may be informative. As shown in table 11, independent church-related institutions paid substantially lower average compensation in 1976-77 than public institutions, but on the whole non-church-related independent institutions paid compensation as high or higher than that in public institutions. In 1976-77, compensation in the independent sector on the whole moved up at a pace equal to or slightly faster than in the public sector (table 12).

TABLE 9

CHANGES IN NUMBER AND COMPENSATION OF FACULTY,
1973-74 TO 1977-78
FIVE TYPES OF INSTITUTIONS

	1973-1974	1974-1975	1975-1976	1976-1977	1977-1978
1. Number of FTE[1] faculty on the payroll, all ranks[2]	100	101	103	106	108
2. Average compensation[3] per FTE faculty member, all ranks[2]	100	106	113	120	126
3. Annual percentage increases in average faculty compensation	4.0%	6.3%	6.2%	6.6%	6.4%
4. Ratio: FTE student enrollment to FTE faculty on the payroll	15.0	15.6	15.8	15.4	15.3

[1]Full-time equivalent.

[2]Index Numbers: 1973-74 = 100.

[3]Includes fringe benefits.

TABLE 10

ANNUAL PERCENTAGE INCREASES IN FACULTY COMPENSATION,
1972-73 THROUGH 1977-78

	Percentage Increases in Faculty Compensation or Salaries			Percentage Increase in Consumer Price Index[4]	Percentage Increases in Average Weekly Earnings, Private Non-agricultural Employment[4]
	Sample of Independent Institutions[1]	Public and Private Institutions Reporting to AAUP[2]	All Institutions: Public and Private[3]		
1972-73 to 1973-74	4.0%	5.9%	5.1%	8.7%	6.5%
1973-74 to 1974-75	6.3	6.4	5.8	10.0	6.2
1974-75 to 1975-76	6.2	6.4	6.0	7.3	6.9
1975-76 to 1976-77	6.6	5.5	4.7	6.2	7.4
1976-77 to 1977-78	6.4	---	5.2	6.6[5]	7.2[5]

[1]Data from survey conducted as part of the present study; 100 institutions 1972-73 to 1976-77; 135 institutions 1976-77 to 1977-78. Refers to total compensation.

[2]AAUP Bulletin, August 1977, p. 155. Refers to total compensation.

[3]National Center for Education Statistics. Refers to salaries.

[4]SOURCE: U. S. Department of Labor.

[5]Preliminary; estimated by authors.

TABLE 11

AVERAGE FACULTY COMPENSATION BY TYPE OF INSTITUTION

	1976-77
Universities[1]	
Public	$ 22,120
Independent Non-Church-Related	24,910
Independent Church-Related	20,960
College I[2]	
Public	20,620
Independent Non-Church-Related	19,510
Independent Church-Related	17,630
College II[3]	
Public	17,890
Independent Non-Church-Related	18,100
Independent Church-Related	15,880

SOURCE: AAUP Bulletin, Summer, 1977, p. 154.

[1]Institutions awarding at least 15 earned doctorates per year in at least three non-related disciplines.

[2]Institutions awarding degrees abcve the bachelor's degree but not qualifying as "universities."

[3]Institutions awarding only the bachelor's degree or equivalent.

TABLE 12

PERCENTAGE CHANGES IN FACULTY COMPENSATION,[1] ALL ACADEMIC RANKS, BY TYPE OF INSTITUTION, 1969-70 THROUGH 1976-77

	1970-71 from 1969-70	1971-72 from 1970-71	1972-73 from 1971-72	1973-74 from 1972-73	1974-75 from 1973-74	1975-76 from 1974-75	1976-77 from 1975-76
Universities[2]							
Public	5.7%	4.3%	4.9%	5.3%	6.3%	6.8%	5.5%
Independent Non-Church-Related	6.3	4.3	4.2	5.6	5.1	6.5	5.9
Independent Church-Related	7.3	4.4	5.8	4.9	5.2	7.1	10.1
Colleges Awarding Some Advanced Degrees[2]							
Public	5.5	3.9	5.6	7.1	7.6	6.2	5.1
Independent Non-Church-Related	8.7	4.9	4.9	4.9	5.4	5.6	5.3
Independent Church-Related	7.5	4.7	5.2	5.3	6.0	6.3	7.1
Colleges Awarding Bachelor's Degrees[2]							
Public	6.6	5.7	4.8	5.8	6.5	5.9	5.8
Independent Non-Church-Related	6.4	4.4	4.2	4.6	4.8	6.0	5.7
Independent Church-Related	7.3	4.1	4.7	4.5	5.1	5.4	5.1

SOURCE: AAUP Bulletin, Summer 1971, p. 226; Summer 1972, p. 182; Summer 1973, p. 192; Summer 1974, p. 176; Summer 1975, p. 127; Summer 1976, p. 210; Summer 1977, p. 156.

[1] Includes salaries and fringe benefits.

[2] For description of institutions, see footnote to table 11.

Faculty Tenure

Table 13 provides information on various aspects of faculty status and working conditions. In recent years the percentage on tenure has been drifting slowly upwards for all types of institutions except the Research and Doctoral-Granting Universities. The largest gain in 1977-78 was among Liberal Arts Colleges I. Faculty separations and new appointments have held about steady at 10 to 11 percent with appointments somewhat ahead, confirming the continuing slow increase in FTE faculty shown in table 9.

Faculty Work Load

The work load of faculty as measured by the ratio of students to faculty has been declining slightly over the past several years for the sample as a whole (see table 13). The slow downward trend has been common to all types of institutions (with the possible exception of the Two-Year Colleges) and has been most pronounced among the Comprehensive Universities and Colleges.

When asked about changes in the teaching load during the past year, senior faculty members representing each institution reported that the number of classroom hours had remained approximately steady. Almost the same number of institutions had experienced decreases as increases (table 14). Most faculty representatives reported increases in the teaching load as measured by number of students and by advisory and committee work. The reported increase in student load, however, must be taken with a grain of salt as it is not consistent with the relatively stable but slightly declining student-faculty ratio as shown in tables 9 and 13.

The availability of supporting services is increasing in many institutions according to reports of Senior Faculty Members. Gains are reported especially for secretarial and related assistance and to some extent for research support and professional travel (table 15).

Methodological Comment

It will be noted that in tables 14 and 15 a column has been added with the heading Trend Consensus. This column provides numbers expressing the degree of change reported by a group of respondents from one year to the next. Each number is computed simply by subtracting the percentage of respondents reporting "decrease" from those reporting "increase." The difference, which may have a positive or negative sign, is an indication of the degree of change and indicates the way the trend is running. A large, positive result indicates that most respondents are reporting increases. The trend is strong and positive. A large, negative result indicates the opposite--a strong and negative trend. Small numbers indicate a weak trend which can result from about equal percentages of respondents reporting increases and decreases or from most respondents reporting no change. The sign and size of the trend consensus index thus indicate both the direction and force of a trend, taking into equal account each respondent.

TABLE 13

DATA RELATING TO THE STATUS OF FACULTY,
BY TYPE OF INSTITUTION, 1974-75 TO 1977-78

	Research and Doctoral-Granting Universities	Comprehensive Universities and Colleges	Liberal Arts Colleges I	Liberal Arts Colleges II	Two-Year Colleges	Five Types of Institutions Combined
Percentage of Faculty on Tenure						
1974-75	57	57	63	46	52	52
1975-76	58	60	64	48	52	53
1976-77	56	60	63	51	56	55
1977-78	56	61	66	53	54	56
Faculty Turnover						
Separations as percentage of faculty:						
1974-75	11	9	9	11	13	11
1975-76	10	9	8	11	10	10
1976-77	10	9	7	12	7	9
1977-78	10	8	8	16	7	10
New appointments as percentage of faculty:						
1974-75	10	10	8	10	13	10
1975-76	10	9	9	11	9	10
1976-77	11	9	8	13	10	11
1977-78	12	9	9	13	11	11
Student-Faculty Ratios						
Ratios of student enrollment FTE[2] to faculty on the payroll FTE:						
1974-75	13.3	18.7	12.8	15.5	16.3	15.6
1975-76	13.3	17.8	12.8	15.5	17.9	15.8
1976-77	12.6	16.6	13.2	15.2	17.1	15.4
1977-78	12.7	16.9	12.5	15.3	16.6	15.3

[1]The National Center for Educational Statistics reports that for all private institutions the tenure percentage in 1975-76 was 51 percent and for all public institutions 57 percent. American Council on Education, A Fact Book on Higher Education, Third Issue, 1975, p. 75.162.

[2]Full-time equivalent.

TABLE 14

CHANGES IN FACULTY WORK LOAD, 1976-77 TO 1977-78, AS REPORTED BY SENIOR FACULTY MEMBERS[1]

	Increase	No Change	Decrease	Don't Know	Trend Consensus[2]
Teaching Load in Number of Classroom Hours:					
Research and Doctoral-Granting Universities	--	90%	10%	--	-10
Comprehensive Universities and Colleges	--	100	--	--	0
Liberal Arts Colleges I	9%	86	5	--	4
Liberal Arts Colleges II	13	82	4	--	9
Two-Year Colleges	17	72	11	--	6
Five Types of Institutions Combined	11	83	5	--	6
Teaching Load in Number of Students:					
Research and Doctoral-Granting Universities	50	50	--	--	50
Comprehensive Universities and Colleges	23	67	11	--	12
Liberal Arts Colleges I	18	77	5	--	13
Liberal Arts Colleges II	37	59	--	4	37
Two-Year Colleges	33	56	11	--	22
Five Types of Institutions Combined	32	62	4	2	28
Load of Advising, Committee Work, etc.:					
Research and Doctoral-Granting Universities	20	80	--	--	80
Comprehensive Universities and Colleges	27	69	--	4	27
Liberal Arts Colleges I	23	73	5	--	18
Liberal Arts Colleges II	29	67	4	--	25
Two-Year Colleges	33	67	--	--	33
Five Types of Institutions Combined	28	68	3	--	28

[1]Based on responses from 106 of 135 institutions.

[2]Percentage of institutions reporting an increase minus the percentage reporting a decrease.

TABLE 15

CHANGES IN SUPPORTING SERVICES FOR FACULTY, 1976-77 TO 1977-78, AS REPORTED BY SENIOR FACULTY MEMBERS[1]

	Increase	No Change	Decrease	Don't Know	Trend Consensus[2]
Secretarial and Related Assistance:					
Research and Doctoral-Granting Universities	10%	60%	20%	10%	10
Comprehensive Universities and Colleges	18	72	10	--	8
Liberal Arts Colleges I	14	86	--	--	14
Liberal Arts Colleges II	41	54	5	--	36
Two-Year Colleges	44	56	--	--	44
Five Types of Institutions Combined	34	61	5	--	29
Research Support:					
Research and Doctoral-Granting Universities	29	61	--	10	29
Comprehensive Universities and Colleges	17	79	--	4	17
Liberal Arts Colleges I	36	64	--	--	36
Liberal Arts Colleges II	25	67	4	4	21
Two-Year Colleges	6	83	--	11	- 5
Five Types of Institutions Combined	22	71	2	5	17
Professional Travel:					
Research and Doctoral-Granting Universities	20	51	29	--	- 9
Comprehensive Universities and Colleges	26	56	18	--	8
Liberal Arts Colleges I	23	72	--	5	23
Liberal Arts Colleges II	21	64	15	--	6
Two-Year Colleges	22	67	11	--	11
Five Types of Institutions Combined	22	65	13	--	9

[1]Based on responses from 106 of 135 institutions.

[2]Percentage of institutions reporting an increase minus the percentage reporting a decrease.

The Trend Consensus has been used for many years by the National Association of Purchasing Management to identify trends in business and industry. In the study of institutions of higher education, the Trend Consensus will become increasingly useful as data become available over a period of several years.

Administrative and General Service Staff

Overall, the number of administrative and general service employees appears to have grown substantially over the past two years with Two-Year Colleges leading the way in 1976-77 and Liberal Arts Colleges II in 1977-78 (table 16). In the Research and Doctoral-Granting Universities, however, the employment trend for administrative and general service workers has been downward. Also, as shown in the lower portion of table 16, the employment of clerical and other general service staff appears to have been declining.

Our data on administrative and general service staff have been somewhat erratic for unknown reasons, and we therefore do not draw strong inferences from these figures. We suspect that this erratic behavior has been due partly to the practice in colleges and universities of increasing or decreasing administrative and non-academic staff as the financial position of institutions fluctuates. It may also have been due partly to decisions of the institutions to contract with outside firms for food service, building maintenance, etc., or to cancel such contracts. This growing practice of outside contracting suggests that our figures may underestimate the true growth of administrative and general service employment over the years. With the mixed picture presented in table 16, we are hesitant to draw any firm conclusion.

Percentage increases in wages and salaries for administrative and general service workers[1] were considerably smaller in 1977-78 than in previous years (table 17). Indeed, the marked slowing up of pay increases among these workers is the one possible indication of retrenchment we have found in connection with our study of faculty and staff. One suspects that these groups have felt the pinch of budgetary control more severely than the faculties.

Conclusions

The data reported by the institutions on changes in faculty and staff in 1976-77 yielded the following detailed conclusions:

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[1] A recent survey of the College and University Personnel Association (Chronicle of Higher Education, May 15, 1978, p. 8) revealed that administrative salaries for all institutions, public and private, had risen by 8.5 percent over the period 1975-76 to 1977-78, considerably less than the increases in faculty salaries over the same period. Comparative data on administrative salaries for public and independent institutions are presented in table VI of Appendix C.

TABLE 16

NUMBER OF FULL-TIME ADMINISTRATIVE AND GENERAL SERVICE EMPLOYEES,[1]
1973-74 THROUGH 1977-78
(Index Numbers: 1973-74 = 100)

	1973-1974	1974-1975	1975-1976	1976-1977	1977-1978
Research and Doctoral-Granting Universities	100	102	100	99	94
Comprehensive Universities and Colleges	100	102	103	107	105
Liberal Arts Colleges I	100	99	105	103	103
Liberal Arts Colleges II	100	102	105	104	110
Two-Year Colleges	100	99	105	109	107
Five Types of Institutions Combined:					
Administrative Staff	100	108	106	110	110
Clerical Staff	100	99	98	98	96
Other General Service Staff	100	100	101	100	95
Total	100	102	101	101	98

[1]General Service Employees include secretarial and clerical employees, tradesmen, and other non-professional and non-administrative workers.

TABLE 17

MEDIAN[1] PERCENTAGE INCREASES OF WAGES AND SALARIES OF ADMINISTRATIVE AND GENERAL SERVICE STAFF, 1974-75 TO 1977-78

	Research & Doctoral-Granting Universities	Comprehensive Universities and Colleges	Liberal Arts Colleges I	Liberal Arts Colleges II	Two-Year Colleges	Five Types of Institutions Combined
Administrative Staff:						
1974-75 to 1975-76	7%	7%	6%	7%	--	7%
1975-76 to 1976-77	7	6	6	5	4%	6
1976-77 to 1977-78	5	4	4	2	8	4
Clerical Staff:						
1974-75 to 1975-76	8	7	6	7	--	7
1975-76 to 1976-77	6	5	7	5	7	6
1976-77 to 1977-78	4	6	7	6	6	6
Other General Service Staff:						
1974-75 to 1975-76	7	7	6	7	--	7
1975-76 to 1976-77	8	9	6	6	7	8
1976-77 to 1977-78	3	4	5	1	4	3

[1]Average percentage increase granted by median institution.

1. The size of the faculties is keeping pace with enrollment, perhaps moving slightly ahead.

2. In the past two years, faculty compensation has almost kept pace with inflation as measured by the Consumer Price Index but has fallen short of increases in Average Weekly Earnings in Private Non-Agricultural Employment.

3. The percentage of faculty members on tenure has been moving slowly upward, but is still at only 56 percent of total faculty.

4. The turnover of faculty has held relatively steady at 10 to 11 percent a year. New appointments have continued to exceed separations by a very small margin.

5. The trend of administrative and general service employment has been mixed. Overall, employment increased somewhat in 1977-78 but the Universities and the Two-Year Colleges experienced decreases.

6. Wage and salary raises for administrative and general service employees, except for clerical staff, failed to keep pace with inflation, let alone with Average Weekly Earnings in Private Non-Agricultural Employment.

The two general findings from the data presented in this chapter are (1) that the academic part of independent higher education as represented by faculty members' compensation, tenure, and turnover of faculty is being maintained without observable deterioration; and (2) that the non-academic part as represented by the pay of administrative and general service employees may possibly be slipping a little. This second finding is tentative in that it is based on data that may not be wholly reliable. As indicated, our figures in this area are somewhat erratic and a single-year change may not be significant. However, it is possible that as a result of the continuing financial pressure of recent years a point of reduced employment and inadequate pay raises for administrative and general service workers has been reached. We repeat that this finding is highly tentative.

CHAPTER IV

EDUCATIONAL PROGRAM: CONTENT AND QUALITY

In preparing each of the three previous reports, we made considerable effort to learn about program changes and thus to obtain evidence about educational expansion or retrenchment. We considered educational trends as important indicators of institutional progress, no less important than data on enrollment or finances.

Findings of the First Three Reports

In the first study, we asked the institutions to report on additions or expansions, and deletions or contractions, of programs. "Programs" were defined as academic departments or majors, research activities, services for students, and academic support programs such as libraries, audio-visual centers, auxiliary enterprises, and public services. We had expected to find considerable retrenchment. Instead we found that additions and expansions exceeded deletions and contractions by ten to one. Only one institution out of 80 respondents had experienced net retrenchment of programs (see pp. 28-31 of the First Report).

In view of these results, we tried in the second study to gather much more information about changes in the content and quality of educational programs. Consistent with the first study we found that new programs and expansions of existing programs continued to exceed deletions and contractions. The educational environment was showing general improvement as reported by senior officials and faculty members. Expectations for the years ahead were overwhelmingly optimistic (see pp. 31-49 of the Second Report).

The Third Report (see pp. 27-32) was consistent with the two prior surveys, showing only that curricula proliferation may have slowed but revealing no evidence of retrenchment. Presidential assessments of the condition of the institutions and the outlook continued to be hopeful--certainly not pessimistic.

Suspicions of retrenchment continue to persist, however, and in this fourth survey we have repeated questions asked in the second survey in our further effort to detect any adverse changes in program quality. The results of these inquiries are presented in this chapter (tables 18 to 25). In addition we have personally conducted telephone interviews with many academic deans and chief business officers probing for evidence of retrenchment not captured by our self-administered questionnaires (see chapter IX).

Faculty: Qualifications, Competence, and Performance

The institutions report strong, positive trends in the qualifications, competence, and performance of faculty. As shown in table 18, a third to a half of the institutions report improvement over the past year in various aspects of faculty performance, many report no change, and only a handful indicate that some deterioration may have set in. The agreement between the appraisals of the chief academic officers and the senior faculty members is striking. These results are very similar to what we found two years ago, though they are not strictly comparable since the Research Universities and the Two-Year Colleges have been added to the sample.

Detailed data on faculty qualifications, competence, and performance by types of institutions are provided in Appendix C, table VII. As this table shows, change in faculty performance appears to be much less among Liberal Arts Colleges I than among the other four types of institutions. This and other evidence suggests that the selective Liberal Arts Colleges are changing less than other types of institutions.

Students: Qualifications, Competence, and Performance

As we have indicated, the academic qualifications of students admitted to the independent sector, as measured by rank in high school class, has held fairly steady over recent years. Average SAT scores have declined but by not as much as the drop in the national averages. From these facts we infer that the independent sector may have held its own and perhaps gained slightly in the academic potential of its students as compared to the whole higher educational system. However, high school rank and SAT scores do not tell the whole story about student preparation and performance. To provide more detailed information, we asked the institutions to comment on recent changes in the academic preparation, interests, and overall performance of their students. The responses are presented in tables 19 and 20 with further elaboration by types of institutions in Appendix C, tables VIII and IX.

The message conveyed by our data regarding students is that at many institutions their secondary school preparation is deteriorating, especially their preparation in the skills of reading, writing, and mathematics. Also, at many institutions, students are seen as losing interest in contemporary public affairs, becoming less active politically, becoming heavily oriented toward careers and less so toward liberal learning, and becoming more grade and credit conscious. On the positive side, many institutions report that students are becoming more conscientious in their work, more involved in extracurricular activities, and more loyal to their colleges or universities.

These results are similar to those obtained two years ago from a somewhat different sample. (For those wishing to compare the two surveys, the earlier one is found in our second report of 1976 on pages 31-49. See also table 25 in this report.) In 1977-78, the relative number of respondents reporting decreases in academic preparation was somewhat less than before; extracurricular participation and institutional loyalty

TABLE 18

CHANGES IN QUALIFICATIONS, COMPETENCE, AND PERFORMANCE OF FACULTY, 1976-77 AND 1977-78, AS REPORTED BY CHIEF ACADEMIC OFFICERS AND SENIOR FACULTY MEMBERS, FIVE TYPES OF INSTITUTIONS COMBINED[1]

	Percentage of Reporting Institutions				
	Increase	No Change	Decrease	Don't Know	Trend Consensus[2]
Percentage of faculty with Ph.D. or equivalent					
Chief Academic Officers	54%	41%	3%	1%	51
Senior Faculty Members	51	45	--	5	54
General competence of new additions to faculty as compared with previous additions					
Chief Academic Officers	59	38	2	1	57
Senior Faculty Members	49	45	1	5	48
Willingness of faculty to innovate					
Chief Academic Officers	44	46	8	2	82
Senior Faculty Members	49	48	2	1	47
General quality of faculty performance					
Chief Academic Officers	51	46	1	1	50
Senior Faculty Members	53	44	2	1	51
Concern for teaching					
Chief Academic Officers	40	58	--	2	40
Senior Faculty Members	43	55	1	--	42
Concern for advising students					
Chief Academic Officers	50	47	2	--	48
Senior Faculty Members	52	46	2	--	50
Productivity in research and scholarship					
Chief Academic Officers	32	64	2	1	30
Senior Faculty Members	28	70	--	2	28
Loyalty and commitment to institution					
Chief Academic Officers	28	59	11	2	17
Senior Faculty Members	29	56	14	--	15

[1]Based on responses from 108 of 135 institutions.

[2]Percentage of institutions reporting an increase minus percentage reporting a decrease.

TABLE 19

CHANGES IN ACADEMIC PREPARATION OF STUDENTS ADMITTED, 1976-77 AND 1977-78, AS REPORTED BY CHIEF ACADEMIC OFFICERS, CHIEF STUDENT PERSONNEL OFFICERS, AND SENIOR FACULTY MEMBERS, FIVE TYPES OF INSTITUTIONS COMBINED[1]

	Percentage of Reporting Institutions				
	Increase	No Change	Decrease	Don't Know	Trend Consensus[2]
Reading skills					
Chief Academic Officers	6%	56%	34%	3%	- 28
Chief Student Personnel Officers	9	52	34	4	- 25
Senior Faculty Members	8	41	49	2	- 41
Writing skills					
Chief Academic Officers	4	52	40	3	- 36
Chief Student Personnel Officers	5	55	34	6	- 29
Senior Faculty Members	4	42	52	2	- 48
Mathematical skills					
Chief Academic Officers	9	57	30	4	- 21
Chief Student Personnel Officers	9	61	20	10	- 11
Senior Faculty Members	7	43	36	13	- 29
Humanistic and social studies preparation					
Chief Academic Officers	9	62	18	11	- 9
Chief Student Personnel Officers	14	57	18	11	- 4
Senior Faculty Members	7	55	23	14	- 16
Science preparation					
Chief Academic Officers	10	63	20	6	- 10
Chief Student Personnel Officers	13	63	10	13	3
Senior Faculty Members	5	56	20	19	- 15

[1]Based on responses from 108 of 135 institutions.

[2]Percentage of institutions reporting an increase minus percentage reporting a decrease.

TABLE 20

CHANGES IN STUDENT ACHIEVEMENT AND INTERESTS, 1976-77 AND 1977-78, AS REPORTED BY CHIEF ACADEMIC OFFICERS, CHIEF STUDENT PERSONNEL OFFICERS, AND SENIOR FACULTY MEMBERS, FIVE TYPES OF INSTITUTIONS COMBINED[1]

	Percentage of Reporting Institutions				
	Increase	No Change	Decrease	Don't Know	Trend Consensus[2]
Conscientious work					
Chief Academic Officers	31%	54%	11%	3%	20
Chief Student Personnel Officers	39	54	6	1	33
Senior Faculty Members	34	58	6	2	28
General academic achievement					
Chief Academic Officers	16	75	5	3	11
Chief Student Personnel Officers	18	75	5	2	13
Senior Faculty Members	18	69	10	2	18
Participation in extracurricular activities					
Chief Academic Officers	34	56	6	4	28
Chief Student Personnel Officers	39	55	6	--	33
Senior Faculty Members	25	55	10	11	15
Interest in contemporary public affairs					
Chief Academic Officers	10	53	27	10	- 17
Chief Student Personnel Officers	10	58	31	1	- 21
Senior Faculty Members	10	52	33	4	- 23
Political activism					
Chief Academic Officers	3	38	51	7	- 48
Chief Student Personnel Officers	5	48	44	3	- 39
Senior Faculty Members	3	46	47	4	- 44
Loyalty to institution					
Chief Academic Officers	27	62	3	8	24
Chief Student Personnel Officers	29	64	7	--	22
Senior Faculty Members	22	62	7	9	19
Orientation toward careers					
Chief Academic Officers	80	14	2	3	78
Chief Student Personnel Officers	79	19	2	--	77
Senior Faculty Members	86	10	1	2	85
Orientation toward liberal learning					
Chief Academic Officers	7	55	34	4	- 27
Chief Student Personnel Officers	6	60	31	3	- 25
Senior Faculty Members	7	41	51	2	- 44
Grade and credit consciousness					
Chief Academic Officers	53	42	3	3	50
Chief Student Personnel Officers	65	30	5	1	60
Senior Faculty Members	64	35	--	--	64

[1]Based on responses from 108 of 135 institutions.

[2]Percentage of institutions reporting an increase minus percentage reporting a decrease.

slowed up more strongly but conscientious work appeared to have slipped a bit. The attitudes toward careers, liberal learning, and grades were essentially unchanged.

Had the same questions been asked of a sample of public institutions, the results would undoubtedly have been similar. The responses we report do not necessarily reflect adversely on the independent sector of higher education relative to the public sector, but they do suggest that many educators--public and independent--are not happy about trends in secondary school preparation and performance of students. In interpreting these data, however, it is important to note that in virtually every case a majority of institutions report either no change or an improvement, and only a minority report deterioration. The notable exceptions are grade and credit consciousness and orientation toward careers.

Instruction: Methods and Quality

We repeated this year our inquiries of two years ago about instructional methods. The results presented in table 21 were very similar to those obtained from the earlier survey. The most striking differences were that fewer institutions than before reported that average class size is increasing, and more reported increasing rigor of academic standards and increasing rigor in assessing students. Regarding innovation, the reports this time were very similar to those of two years ago. On both occasions, many institutions reported increases in laboratory-studio instruction, in use of independent study of various types, and in new and innovative forms of instruction. Almost no institutions reported decreases in these less-traditional modes of teaching. Also, in both surveys, about half the institutions alleged that the overall quality of the learning environment was improving, and only about 5 percent indicated that it was deteriorating.

It is of interest that there appeared to be no net trend in the percentage of classes taught by regular full-time faculty (as contrasted with assistants, adjunct faculty, and other part-time teachers). It is commonly assumed that teaching by part-time faculty is on the increase. In both surveys, most institutions reported no change, and those reporting increases about balanced those reporting decreases.

Table X of Appendix C provides responses on instructional methods by types of institutions. The various types of institutions did not report wide differences in the trend of teaching methods. However, the Liberal Arts Colleges II appeared to be the most innovative, and the Liberal Arts Colleges I the least so.

Student Services

The availability of student services has been expanding as shown in table 22. The change during the past year was very similar to that reported by the institutions two years ago. The booms of two years ago in women's programs and career counseling have abated somewhat but are

TABLE 21

TRENDS IN METHODS AND QUALITY OF INSTRUCTION, 1976-77 TO 1977-78 AS REPORTED BY CHIEF ACADEMIC OFFICERS, CHIEF STUDENT PERSONNEL OFFICERS, AND SENIOR FACULTY MEMBERS, FIVE TYPES OF INSTITUTIONS COMBINED[1]

	Percentage of Reporting Institutions				Trend Consensus[3]
	Increase	No Change	Decrease	Don't Know	
Percentage of classes taught by regular full-time faculty[2]					
Chief Academic Officers	21%	59%	17%	4%	4
Senior Faculty Members	51	45	--	5	51
Average class size					
Chief Academic Officers	23	60	16	--	7
Chief Student Personnel Officers	21	69	8	2	13
Senior Faculty Members	29	54	13	4	16
Rigor in assessing student performance					
Chief Academic Officers	36	58	5	--	31
Chief Student Personnel Officers	50	37	6	7	44
Senior Faculty Members	34	50	15	--	21
Rigor of academic standards					
Chief Academic Officers	35	62	3	--	32
Chief Student Personnel Officers	40	56	2	2	38
Senior Faculty Members	31	57	11	--	20
Overall quality of learning environment					
Chief Academic Officers	51	40	6	3	45
Chief Student Personnel Officers	52	40	2	5	50
Senior Faculty Members	50	40	7	2	43
Amount of laboratory-studio instruction (vs. lecture-discussion)					
Chief Academic Officers	23	76	--	--	23
Chief Student Personnel Officers	30	62	--	7	30
Senior Faculty Members	21	68	3	9	18

TABLE 21 (Continued)

	Percentage of Reporting Institutions				Trend
	Increase	No Change	Decrease	Don't Know	Consensus[3]
Innovative teaching methods such as audio-visual, computer-assisted, personalized instruction, modular systems, etc.					
Chief Academic Officers	57%	42%	--	--	57
Chief Student Personnel Officers	51	42	4	4	47
Senior Faculty Members	61	35	4	--	57
Traditional independent study such as research projects, reading courses, senior theses, etc.					
Chief Academic Officers	27	69	2	1	25
Chief Student Personnel Officers	32	60	3	4	29
Senior Faculty Members	26	62	9	3	15
Non-traditional independent study such as credit by examination, experiential learning, extended degree programs, etc.					
Chief Academic Officers	47	51	2	--	45
Chief Student Personnel Officers	40	48	6	5	34
Senior Faculty Members	41	53	1	5	40
Experiential learning programs such as combined work-study, clinical training, internships, etc.					
Chief Academic Officers	59	38	1	1	58
Chief Student Personnel Officers	51	43	2	4	49
Senior Faculty Members	60	35	1	4	59

[1]Based on responses from 108 of 135 institutions.

[2]This question not submitted to student personnel officers.

[3]Percentage of institutions reporting an increase minus percentage reporting a decrease.

TABLE 22

CHANGES IN AVAILABLE STUDENT SERVICES, 1976-77 AND 1977-78, AS REPORTED BY CHIEF STUDENT PERSONNEL OFFICERS[1]

	Percentage of Reporting Institutions				Trend Consensus[2]
	Increase	No Change	Decrease	Don't Know	
Career counseling					
Research and Doctoral-Granting Universities	67%	33%	--	--	67
Comprehensive Universities and Colleges	88	12	--	--	88
Liberal Arts Colleges I	59	41	--	--	59
Liberal Arts Colleges II	68	31	--	1%	68
Two-Year Colleges	44	44	13%	--	31
Five types of institutions combined	65	33	2	--	63
Career placement					
Research and Doctoral-Granting Universities	46	40	--	14	46
Comprehensive Universities and Colleges	71	24	--	5	71
Liberal Arts Colleges I	50	45	--	5	50
Liberal Arts Colleges II	63	36	--	1	63
Two-Year Colleges	25	69	6	--	19
Five types of institutions combined	54	42	1	2	53
Programs for women					
Research and Doctoral-Granting Universities	54	46	--	--	54
Comprehensive Universities and Colleges	53	47	--	--	53
Liberal Arts Colleges I	59	27	--	14	59
Liberal Arts Colleges II	37	53	5	6	32
Two-Year Colleges	38	63	--	--	38
Five types of institutions combined	43	50	2	4	41
Programs for minorities					
Research and Doctoral-Granting Universities	27	73	--	--	27
Comprehensive Universities and Colleges	12	81	7	--	5
Liberal Arts Colleges I	23	73	5	--	18
Liberal Arts Colleges II	20	63	5	12	15
Two-Year Colleges	25	75	--	--	25
Five types of institutions combined	21	69	4	6	15

TABLE 22 (Continued)

	Percentage of Reporting Institutions				Trend Consensus[2]
	Increase	No Change	Decrease	Don't Know	
Psychological counseling					
Research and Doctoral-Granting Universities	47%	46%	7%	--	40
Comprehensive Universities and Colleges	51	45	4	--	47
Liberal Arts Colleges I	9	82	5	5%	4
Liberal Arts Colleges II	43	46	5	6	38
Two-Year Colleges	38	56	6	--	32
Five types of institutions combined	38	53	5	4	33
Health services					
Research and Doctoral-Granting Universities	26	67	--	7	26
Comprehensive Universities and Colleges	24	76	--	--	24
Liberal Arts Colleges I	9	68	18	5	- 9
Liberal Arts Colleges II	35	64	--	--	35
Two-Year Colleges	25	63	6	6	19
Five types of institutions combined	27	66	4	3	23

[1]Based on responses from 104 of 135 institutions.

[2]Percentage of institutions reporting increase minus percentage reporting decrease.

still strong, and strong emphasis on career placement continues. There is no evidence whatever of widespread cutbacks in student services.

General Assessment of Condition by the Presidents

The presidents were asked to give their assessments of their institutions with respect to three major areas of concern: financial, academic condition, and student services. The results are shown in table 23. As in past surveys the overwhelming majority of presidents believe their institutions are either "holding their own" or "gaining ground." This is true for all types of institutions. It is remarkable that the percentage who believe their institutions are gaining ground financially increases year after year.

Each president was also asked to give an opinion about the outlook for his or her institution over the next five years. The responses here indicate a declining trend in the percentage who think their institution will improve substantially, the one exception being the presidents of Comprehensive Universities and Colleges. This result suggests that optimism may be subsiding. On the other hand, the percentage who believe that their institution will improve (either substantially or a little) has increased slightly over the years and the percentage who believe that their institution will slip has not increased. From these data, one can only conclude that optimism and confidence have not been seriously eroded during the past several years. Interestingly, the least optimistic outlook is reported by the Research and Doctoral-Granting Universities where the problems--relating to the funding of research, advanced study, hospitals, public service activities, etc.--are quite different from those faced by other types of institutions.

Conclusions and Summary

The conclusions presented here are based on analyses of responses from the participating institutions regarding recent changes and the outlook for the future with respect to the performance of faculty and students, educational programs, and general institutional condition. Responses were received from presidents (or chancellors), chief academic officers (academic vice presidents, provosts, or deans), chief student personnel officers (vice presidents for student affairs, deans of students), and senior faculty members (chairpersons of faculty senates or of major faculty committees). The purpose of these inquiries was to discover changes in the range of programs and in institutional performance that might be a signal of deterioration or distress. The conclusions follow:

1. Qualifications, competence, and performance of the faculty in the independent sector are improving with respect to percentage of faculty with Ph.D.s, general competence of new additions to the faculty as compared to previous additions, willingness to adopt innovations, concern for teaching, concern for advising students, productivity in research and scholarship, loyalty to the institution, and "general

TABLE 23

BROAD GENERAL ASSESSMENTS BY THE PRESIDENTS OF RECENT TRENDS IN THE CONDITION OF THEIR INSTITUTIONS, 1974-75 THROUGH 1977-78[1]

	Percentage of Reporting Institutions				
	Gaining Ground	Holding Our Own	Losing Ground	Not Reporting	Trend Consensus[2]
Financial condition, as assessed in:					
1974-75	30%	48%	22%	--	8
1975-76	41	39	20	--	21
1976-77	49	36	15	--	34
1977-78	50	42	7	1%	43
Academic condition, as assessed in:					
1974-75	71	28	1	--	70
1975-76	56	44	--	--	56
1976-77	67	32	1	--	66
1977-78	65	34	--	1	65
Quality of student services, as assessed in:					
1974-75	52	45	3	--	49
1975-76	51	44	5	--	46
1976-77	42	49	9	--	33
1977-78	66	32	2	1	64

[1]Based on 89 responses in 1974-75, 85 responses in 1975-76, 86 responses in 1976-77 of 100 institutions and 106 responses in 1977-78 of 135 institutions.

[2]Percentage of institutions reporting gaining ground minus percentage reporting losing ground.

quality of performance." The number of institutions reporting that deterioration in these respects is taking place is negligible.

2. The academic potential of students in the independent sector appears to be holding about steady as measured by SAT scores and rank in high school class. But the institutions indicate that the secondary preparation of students is deteriorating and also that student interest in careers and grades is increasing and that their interest in liberal learning and contemporary affairs in slipping. These changes are greatly influenced by nationwide trends to which all of higher education is subject. On the basis of these results one cannot conclude that the independent sector is losing ground, relative to all of higher education, in its power to attract students or in the quality and performance of its students. However, the declining interest in liberal learning, if it should prove to be persistent, would be a serious threat to the independent sector.

3. The independent sector appears to be involved in a wave of innovation in methods of instruction. Many institutions report gains and few report deterioration in general quality of instruction.

4. Many institutions are expanding student services and few are contracting them.

5. A large majority of the institutions, in the opinion of their presidents, are "holding their own" or "gaining ground," in finances, academic excellence, and student services.

6. The expectations of the institutions for the next several years, as expressed by the presidents are overwhelmingly optimistic. Not a single president reported in 1977-78 that he thought his institution would deteriorate seriously in the next five years, and only 2 percent of the presidents expected their institutions to "slip a bit" (table 24).

7. The general inferences from the reports of the institutions is that the independent sector is not deteriorating significantly in its overall performance; though budgets are indisputably tight, that there is little evidence of retrenchment with respect to the critical elements of sound education; and that the general level of confidence or morale is high.

The institutions were requested two years ago and again this year to give their best judgments on trends in the characteristics of faculty, students, instructional programs, and student services. In this chapter, the responses from the 1977-78 survey were presented and discussed, and

TABLE 24

EXPECTATIONS FOR THE NEXT FIVE YEARS AS EXPRESSED BY PRESIDENTS OF PARTICIPATING INSTITUTIONS[1]

Responses to the Question: How do you view the outlook for your institution over the next five years?

	Percentage of Reporting Presidents															
	Doctoral-Granting Universities			Comprehensive Universities and Colleges			Liberal Arts Colleges I			Liberal Arts Colleges II			Two-Year Colleges	Five Types of Institutions Combined		
	1975-76	1976-77	1977-78	1975-76	1976-77	1977-78	1975-76	1976-77	1977-78	1975-76	1976-77	1977-78	1977-78	1975-76	1976-77	1977-78
Will improve substantially	50%	43%	15%	27%	21%	34%	28%	29%	27%	52%	34%	30%	44%	44%	32%	32%
Will improve a little	38	57	69	61	67	49	60	62	68	35	48	65	50	44	54	60
No change	12	--	8	8	8	11	--	--	--	9	13	5	6	7	9	6
Will slip a bit	--	--	8	4	--	6	12	9	5	4	5	--	--	5	5	2
Will deteriorate seriously	--	--	--	--	4	--	--	--	--	--	--	--	--	--	--	--
	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

[1]Based on responses from 85 of 100 institutions in 1975-76 and 106 of 135 institutions in 1977-78.

some comparisons with the earlier responses in 1975-76 were made. Table 25 summarizes these comparisons using the concept of the "trend consensus." The trend consensus, as previously explained, is simply the percentage of respondents reporting an increase in a particular variable (e.g., reading skills of students or experiential learning) minus the percentage reporting a decrease in the same variable. The number may be positive or negative depending on whether increases or decreases predominate. For example, the tabulation for reading skills in 1977-78 was as follows:

Increase	8%
No Change	41
Decrease	39
Don't Know	2
	100%

The trend consensus in this case was 8 - 39 = -31 (as shown in table 25) indicating that the trend was strongly downward as judged by senior faculty members. The corresponding trend consensus for 1975-76 was -39 (table 25). From these two figures one can perceive that the change is toward improvement, that is, toward a lesser predominance of decreases.

TABLE 25

SUMMARY OF TREND CONSENSUS RELATING TO CHARACTERISTICS OF FACULTY, STUDENTS, AND THE TEACHING-LEARNING ENVIRONMENT, 1976-77 AND 1977-78 AS REPORTED BY CHIEF ACADEMIC OFFICERS, CHIEF STUDENT PERSONNEL OFFICERS, AND SENIOR FACULTY MEMBERS, FIVE TYPES OF INSTITUTIONS COMBINED

	Trend Consensus[1]	
	1974-75 1975-76	1976-77 1977-78
Trend consensus on changing academic preparation of students:		
Reading skills	- 39%	- 31%
Writing skills	- 50	- 39
Mathematical skills	- 20	- 20
Humanistic and social studies preparation	- 4	- 10
Science preparation	- 4	- 7
Trend consensus on changing student achievement and interest:		
Conscientious work	40	27
General academic achievement	23	11
Participation in extracurricular activities	18	25
Interest in contemporary public affairs	- 17	- 20
Political activism	- 51	- 44
Loyalty to the institution	12	20
Orientation toward careers	89	80
Orientation toward liberal learning	- 45	- 32
Grade and credit consciousness	58	58
Trend consensus on changing methods and quality of instruction:		
Percentage of classes taught by regular full-time faculty	4	51
Average class size	35	12
Rigor in assessing students	10	31
Rigor in academic standards	14	30
Over-all quality of learning environment	38	46
Amount of laboratory-studio instruction	30	24
Innovative teaching methods	65	54
Traditional independent study	38	24
Non-traditional independent study	51	40
Experiential learning	76	55

TABLE 25 (Continued)

	Trend Consensus[1]	
	1974-75 1975-76	1976-77 1977-78
Trend consensus on changing qualifications, competence and performance of faculty:		
Percent of faculty with Ph.D. or equal	62	51
General competence of new additions to faculty	59	53
Willingness of faculty to innovate	46	42
General quality of faculty performance	47	54
Concern for teaching	43	41
Concern for advising students	46	49
Productivity in research and scholarship	11	29
Loyalty and commitment to the institution	9	16
Trend consensus on changing faculty working conditions:		
Teaching load in number of classroom hours	--	1
Teaching load in number of students	32	16
Secretarial related assistance	12	30
Research support	--	19
Student advising, committee work	31	21

[1]Percentage of institutions reporting an increase minus percentage reporting a decrease. Based on average of responses of three officials.

CHAPTER V

OPERATING REVENUES AND EXPENDITURES

The operating revenues and expenditures of colleges and universities are accounted for within what is known as "the current fund." The current fund is the accounting vehicle for financing the regular ongoing operations of institutions. Revenues to the current fund are the monies available to pay for current institutional operations, and expenditures from the current funds are those used to support ongoing instruction, administration, student aid, auxiliary enterprises, etc. Excluded from the current fund are monies for capital purposes (for example, new buildings and major equipment), endowment, and reserves. In this chapter, we present data on current fund revenues and expenditures over the period 1973-74 through 1976-77. These data are exceptionally reliable. They are based on audited financial statements of 125 of our sample of 135 institutions. These statements have been revised to meet the guidelines of the American Institute of Certified Public Accountants (AICPA) and the National Association of College and University Business Officers (NACUBO), and have been verified by the reporting institutions themselves.

A Note on Methodology and Comparability of Data

Each year we have tried to improve the reliability and comparability of our financial data. Developing consistent data from financial statements, including balance sheets, was our first step. This year, with magnificent cooperative effort from the institutions' financial officers we have again made significant strides forward. First, we have incorporated ten major research universities and fifteen two-year colleges into our system of financial comparison. This has been no small achievement and could be accomplished only with substantial work on the part of the institutions themselves.

Second, staff benefits and college work study expenditures have been distributed to the relevant departments or program areas along with salaries. Most institutions report all staff benefits under Institutional Support. The result is a substantial overstatement of administrative costs and an understatement of other operating expenditures, particularly expenditures for Instruction. In one case, through the distribution of staff benefits and work study expenditures, Institutional Support was reduced 40 percent and Instruction was increased 21 percent. This year the institutions have either calculated the correct amounts or assisted us in making reasonable estimates of the distribution of staff benefits as recommended by NACUBO.

We have also identified revenues and expenditures from intercollegiate athletics and removed them from the financial data. As a result,

Educational and General Accounts and Auxiliary Accounts are more comparable among all institutions.

The difficulties of making data for complex research universities comparable with data for other institutions has not and probably never will be completely resolved. While we have managed reasonably well in most areas, medical and health related programs remain elusive. As a compromise, clinical and other health program revenues have been included in Sales and Services of Departments, and the corresponding expenditures have been classified under Academic Support. In one case, however, such revenues and costs are reported with Hospital accounts.

The revisions described above have been made retroactive through fiscal year 1973-74 for all institutions in the sample. This means that current fund financial data in our earlier reports are not comparable with data in this report. Because of the uneven quality of data available prior to 1973-74 we did not attempt to provide comparable data for more than the last four years of revenues and expenditures. A four-year period is sufficient, however, to establish recent trends. The AICPA-NACUBO classifications are described in Appendices B and C along with the protocals used to recode data from financial statements.

Current Fund Revenues

Changes in current fund revenues over the period 1973-74 through 1976-77 are shown in table 26. Over the three years total current fund revenues for all six types of institutions combined increased 33 percent. During the same period, the Consumer Price Index rose 25.4 percent and enrollment increased 4.7 percent (table 1). The combined effect of these two percentages is an increase of 31.3 percent. Thus, it appears that in recent years revenues of the independent sector as a whole have been at least keeping pace with inflation and with the growth of enrollment.

The trend of revenues, after adjustment for inflation and enrollment growth, also shows up in table 27 which provides data on revenues per student expressed in constant (1973-74) dollars. The index of constant dollar revenue per student for all institutions gained 1 percent over the period 1973-74 to 1976-77. The index was down slightly for Research Universities, Liberal Arts Colleges I, and Liberal Arts Colleges II, and it was up slightly for Doctoral-Granting Universities, Comprehensive Universities and Colleges, and Two-Year Colleges. The differences in trend among types of institutions were so small, and combined trend so flat, as to justify the conclusion that revenues about kept pace with the rise in prices and the growth in student load. One significant detail is that the fairly large rise in revenue per student for the Comprehensive Universities and Colleges was due partly to a decline in enrollment.

Table 28 displays the percentage distribution of revenues by sources. In recent years, as in the past, the sources have changed very little from year to year. Among the trends to be noted are: the slowly increasing percentage of revenue derived from tuition and the slowly

TABLE 26

CHANGES IN CURRENT FUND REVENUES
1973-74 TO 1976-77[1]

	Index Numbers: 1973-74 = 100			
	1973-74	1974-75	1975-76	1976-77
Research Universities				
Tuition and Fees	100	110	127	140
State Government	100	116	116	138
Federal Government	100	111	120	126
Private Gifts	100	110	115	124
Endowment Income	100	105	111	120
All Other Income[2]	100	127	140	161
Sub-total, Educational and General	100	111	122	133
Auxiliary Enterprises	100	108	121	132
Hospital	100	117	138	131
Independent Operations	100	113	127	148
Total Revenues	100	113	123	134
Doctoral-Granting Universities				
Tuition and Fees	100	109	123	138
State Government	100	149	151	152
Federal Government	100	109	116	124
Private Gifts	100	110	106	119
Endowment Income	100	104	105	115
All Other Income[2]	100	114	143	164
Sub-total, Educational and General	100	110	121	134
Auxiliary Enterprises	100	108	118	131
Hospital	100	120	144	187
Independent Operations	---	---	---	---
Total Revenues	100	111	123	137
Comprehensive Universities and Colleges				
Tuition and Fees	100	107	118	127
State Government	100	122	116	148
Federal Government	100	117	132	144
Private Gifts	100	104	111	132
Endowment Income	100	106	118	127
All Other Income[2]	100	102	98	117
Sub-total, Educational and General	100	107	117	129
Auxiliary Enterprises	100	107	116	126
Hospital	---	---	---	---
Independent Operations	---	---	---	---
Total Revenues	100	107	117	128

TABLE 26 (Continued)

	Index Numbers: 1973-74 = 100			
	1973-74	1974-75	1975-76	1976-77
Liberal Arts Colleges I				
Tuition and Fees	100	106	117	128
State Government	100	131	153	219
Federal Government	100	103	116	113
Private Gifts	100	99	116	161
Endowment Income	100	105	104	116
All Other Income[2]	100	109	98	100
Sub-total, Educational and General	100	105	115	129
Auxiliary Enterprises	100	108	117	128
Total Revenues	100	106	115	129
Liberal Arts Colleges II				
Tuition and Fees	100	110	123	133
State Government	100	108	106	138
Federal Government	100	113	136	147
Private Gifts	100	110	119	131
Endowment Income	100	123	127	152
All Other Income[2]	100	99	103	126
Sub-total, Educational and General	100	113	125	137
Auxiliary Enterprises	100	109	119	126
Total Revenues	100	112	124	135
Two-Year Colleges				
Tuition and Fees	100	108	129	144
State Government	---	---	---	---
Federal Government	100	112	152	156
Private Gifts	100	113	129	136
Endowment Income	100	85	93	109
All Other Income[2]	100	144	151	188
Sub-total, Educational and General	100	111	129	143
Auxiliary Enterprises	100	109	117	128
Total Revenues	100	111	126	139
Six Types of Institutions Combined				
Tuition and Fees	100	109	125	137
State Government	100	122	123	145
Federal Government	100	111	122	129
Private Gifts	100	109	114	127
Endowment Income	100	106	111	122
All Other Income	100	120	132	152
Sub-total, Educational and General	100	110	121	133
Auxiliary Enterprises	100	108	120	131
Hospital	100	113	130	133
Independent Operations	100	108	116	128
Total Revenues	100	112	122	133

[1]Excludes athletics.

[2]Includes departmental sales and services, contributed services, and other revenues.

TABLE 27

CHANGE IN SELECTED CURRENT FUND REVENUES AND EXPENDITURES, PER STUDENT, CONSTANT DOLLARS, 1973-74 THROUGH 1976-77

		Index Numbers: 1973-74 = 100			
		1973-74	1974-75	1975-76	1976-77
Research Universities					
Revenues:	Tuition and Fees	100	98	101	104
	Educational and General	100	99	97	98
	Total Revenue	100	99	98	99
Expenditures:	Instruction	100	97	94	95
	Research	100	99	95	95
	Educational and General	100	99	97	98
	Total Expenditure	100	99	97	99
Doctoral-Granting Universities					
Revenues:	Tuition and Fees	100	98	101	105
	Educational and General	100	99	99	102
	Total Revenue	100	99	101	105
Expenditures:	Instruction	100	102	105	108
	Research	100	93	95	90
	Educational and General	100	100	102	105
	Total Expenditure	100	100	102	106
Comprehensive Universities and Colleges					
Revenues:	Tuition and Fees	100	98	98	102
	Educational and General	100	98	97	104
	Total Revenue	100	98	97	103
Expenditures:	Instruction	100	100	99	102
	Research	100	99	94	109
	Educational and General	100	101	100	105
	Total Expenditure	100	101	100	105
Liberal Arts Colleges I					
Revenues:	Tuition and Fees	100	95	96	98
	Educational and General	100	95	95	98
	Total Revenue	100	95	95	98
Expenditures:	Instruction	100	96	95	94
	Research	100	101	94	96
	Educational and General	100	97	96	96
	Total Expenditure	100	97	96	96
Liberal Arts Colleges II					
Revenues:	Tuition and Fees	100	99	100	101
	Educational and General	100	102	102	104
	Total Revenue	100	101	101	103
Expenditures:	Instruction	100	95	95	98
	Research	100	59	47	44
	Educational and General	100	99	98	99
	Total Expenditure	100	99	99	99

TABLE 27 (Continued)

		Index Numbers: 1973-74 = 100			
		1973-74	1974-75	1975-76	1076-77
Two-Year Colleges					
Revenues:	Tuition and Fees	100	98	101	105
	Educational and General	100	101	101	104
	Total Revenue	100	101	98	101
Expenditures:	Instruction	100	99	97	98
	Research	100	130	---	209
	Educational and General	100	101	98	102
	Total Expenditure	100	101	98	101
Six Types of Institutions Combined					
Revenues:	Tuition and Fees	100	98	101	104
	Educational and General	100	99	98	101
	Total Revenue	100	101	99	101
Expenditures:	Instruction	100	98	96	99
	Research	100	96	89	95
	Educational and General	100	100	99	101
	Total Expenditure	100	100	99	101

TABLE 28

PERCENTAGE DISTRIBUTION OF CURRENT FUND REVENUES
1974-75 THROUGH 1976-77

	Percent of Total Revenues[1]		
	1974-75	1975-76	1976-77
Research Universities[2]			
Tuition	22%	23%	23%
State Government	2	2	2
Federal Government	26	25	24
Private Gifts	11	10	10
Endowment Income	10	9	9
All Other Income	9	9	9
Sub-total, Educational and General	79	78	78
Auxiliary Enterprises	7	8	8
Hospital	5	6	5
Independent Operations	9	9	10
Total Revenues	100	100	100
Doctoral-Granting Universities[2]			
Tuition	45	46	46
State Government	2	2	2
Federal Government	13	13	12
Private Gifts	9	8	8
Endowment Income	4	3	3
All Other Income	7	7	7
Sub-total, Educational and General	80	79	78
Auxiliary Enterprises	13	13	13
Hospital	7	8	9
Independent Operations	--	--	--
Total Revenues	100	100	100
Comprehensive Universities and Colleges[2]			
Tuition	61	61	61
State Government	2	2	2
Federal Government	7	7	7
Private Gifts	6	6	7
Endowment Income	4	4	4
All Other Income	3	3	3
Sub-total, Educational and General	83	83	83
Auxiliary Enterprises	17	17	17
Hospital	--	--	--
Independent Operations	--	--	--
Total Revenues	100	100	100

TABLE 28 (Continued)

	Percent of Total Revenues[1]		
	1974-75	1975-76	1976-77
Liberal Arts Colleges I[2]			
Tuition	50%	50%	49%
State Government	1	1	1
Federal Government	3	3	2
Private Gifts	10	11	14
Endowment Income	11	10	10
All Other Income	4	4	3
Sub-total, Educational and General	78	78	79
Auxiliary Enterprises	22	22	21
Total Revenues	100	100	100
Liberal Arts Colleges II[2]			
Tuition	49	50	49
State Government	2	2	2
Federal Government	7	7	7
Private Gifts	12	12	12
Endowment Income	3	3	3
All Other Income	4	3	3
Sub-total, Educational and General	76	76	76
Auxiliary Enterprises	24	24	23
Total Revenues	100	100	100
Two-Year Colleges[2]			
Tuition	37	39	39
State Government	1	1	1
Federal Government	5	6	6
Private Gifts	25	25	24
Endowment Income	2	2	2
All Other Income	6	6	7
Sub-total, Educational and General	76	78	78
Auxiliary Enterprises	24	22	22
Total Revenues	100	100	100
Six Types of Institutions Combined			
Tuition	33	34	36
State Government	2	2	2
Federal Government	19	18	17
Private Gifts	11	10	10
Endowment Income	8	7	7
All Other Income	7	7	7
Sub-total, Educational and General	79	78	78
Auxiliary Enterprises	12	12	12
Hospital	4	5	4
Independent Operations	5	5	6
Total Revenues	100	100	100

[1]Percentages may not add to 100 because of rounding or omitted items.

[2]Excludes Athletics.

declining percentages from the federal government, private gifts, and endowment income. There were several notable changes in revenue sources among the various types of institutions. In the case of the Research Universities, there was a steady decline in the percentage derived from the federal government, probably reflecting a relative decline in federal research funds. For the Liberal Arts Colleges I, there was a sharp increase in the percentage of funds derived from private gifts. This can be interpreted favorably in terms of success in fund-raising or unfavorably as increasing dependence on gifts to balance annual budgets. We believe the unfavorable interpretation is the more valid one in that heavy dependence on current gifts means that more gift income is being spent annually and less is avilable for accumulation of endowment, reserves, and physical capital. Moreover, gifts are a precarious source of revenue in that changes in economic conditions or in the attitudes of constituencies can result in unforeseen impairment of the volume of gifts. Still another notable change in sources of revenue is the increase in the percentage derived from tuitions by the Two-Year Colleges.

An examination of differences among the six types of institutions in the sources of their revenue in 1976-77 is of interest. As shown in table 28, the Research Universities are notable for their low dependence on tuition and their high reliance on the federal government. The Comprehensive Universities and Colleges derive an exceptional percentage of their funds from tuition. The Liberal Arts Colleges I and the Two-Year Colleges receive an exceptional proportion of their funds from private gifts. In the case of the Two-Year Colleges, nearly one-fourth of their revenue comes from this source. The Research Universities and the Liberal Arts Colleges I enjoy a relatively large proportion of income from endowments, though this proportion is slowly diminishing over time.

Table 29 applies the "trend consensus" analysis to the revenue data for 1975-76 and 1976-77. This table records the remainders when the number of institutions reporting decreases in dollar revenues from various sources are subtracted from the number of institutions reporting increases in dollar revenues from the same sources. As shown in the table, the remainders or differences tended to be smaller in 1976-77 than in 1975-76, indicating that relatively fewer institutions were reporting increases. This was especially so in the case of the Liberal Arts Colleges II and the Two-Year Colleges. From these data, one would gather that some deterioration in financial position occurred in 1976-77, though the table gives no indication of the extent or depth of the problem.

It is difficult to generalize about the revenue situation as it bears upon the financial condition of the independent universities and colleges. The basic fact is that revenues on the whole have been keeping pace with the combined rate of enrollment growth and inflation. The slight decline in percentage of funds from the federal government is of concern especially for the Research Universities and the Doctoral-Granting Universities. Also the decline in the "trend consensus" data in table 29 is an unfavorable sign. However, from the data we have gathered, it appears that no dramatic change in the financial situation occurred in 1976-77. Conditions may have deteriorated very slightly; certainly they have not improved very much.

TABLE 29

TREND CONSENSUS FOR CURRENT FUND REVENUES IN DOLLARS[1]
1975-76 AND 1976-77

	Research and Doctoral-Granting Universities		Comprehensive Universities and Colleges		Liberal Arts Colleges I		Liberal Arts Colleges II		Two-Year Colleges		Five Types of Institutions Combined	
	1975-76	1976-77	1975-76	1976-77	1975-76	1976-77	1975-76	1976-77	1975-76	1976-77	1975-76	1976-77
Tuition and Fees	100	100	100	85	100	74	100	82	88	78	98	82
State Government[2]	60	6	40	0	44	39	14	19	16	29	24	20
Federal Government[2]	66	45	75	22	44	-17	42	42	17	28	43	29
Private Gifts	65	70	43	17	61	56	30	35	56	0	42	31
Endowment Income	60	80	40	58	48	52	38	48	5	45	35	51
Sales and Services	60	80	4	19	17	0	2	24	22	0	11	19
Contributed Services	- 5	- 5	0	0	4	- 4	- 4	0	- 6	0	- 3	- 1
Sub-total, Educational and General	100	100	100	88	92	83	92	74	88	66	92	77
Auxiliary Enterprises[3]	85	100	79	82	92	83	84	68	67	67	81	74
Total Revenues	100	100	100	88	96	91	92	76	88	72	93	81

[1]Percentage of institutions reporting an increase in dollar revenues minus percentage reporting a decrease. An increase from 1975-76 to 1976-77 in the number signifies a rising trend; a decrease signifies a falling trend over the two years.

[2]Excludes all student aid except that which is campus-based.

[3]Athletic revenues have been excluded.

Current Fund Expenditures

The trends of expenditures by purposes differ somewhat among the various categories of institutions (table 30), but on the whole the percentage allocations of expenditures remain relatively constant from year to year (table 31). This constancy of percentage allocations for various purposes merely reflects the practice in most institutions of shaping each annual budget using across-the-board increases. On the whole, the modest changes in allocation do not reveal very much about the financial condition of the institutions, though they are of general interest.

However, there is one relatively small change in allocation that is of considerable interest. It is the tendency for increases in Educational and General Expenditures to be slightly larger than increases for Expenditures for Instruction. This phenomenon shows up in tables 27 and 30. It holds for all but one of the types of institutions and for all combined. These data suggest that costs are rising in the non-instructional budgets faster than in the instructional budgets, and that over time an even lower proportion of the budget is assigned to instruction. From this one may infer that faculty salaries are not keeping pace with other costs and are bearing a disproportionate share of the current financial stringency.

In any given year, there are substantial differences among the six types of institutions in the allocation of funds (table 31). The Research and Doctoral-Granting Universities assign a relatively high percentage to research, public service, and to academic support (which includes medical clinics, libraries, etc.); the other smaller institutions allocate a relatively high percentage to student services (which includes admissions), to institutional support (which includes administration), and to plant operation and maintenance, and to student aid. Remarkably, the percentage devoted to instruction is roughly similar for all types of institutions.

Conclusions

From the analysis of current fund revenues and expenditures some tentative conclusions about the financial position and progress of independent higher education may be drawn.

1. During the period 1973-74 through 1976-77 current revenues approximately kept pace with the combined effects of inflation and enrollment growth. This was a major accomplishment. However, for current revenues merely to keep pace with enrollment growth and inflation allowed little room for improvement of faculty and staff compensation beyond the cost of living increases. Indeed, because of rising costs in non-salary areas, the institutions were not quite able to raise faculty and staff compensation in pace with cost of living increases (see tables 9 and 10). Thus, academic compensation fell behind the increase

TABLE 30

CHANGE IN CURRENT FUND EXPENDITURES, 1973-74 TO 1976-77

	Index Numbers: 1973-74 = 100			
	1973-74	1974-75	1975-76	1976-77
Research Universities				
Instruction	100	109	118	128
Research	100	112	119	128
Public Service	100	108	119	122
Academic Support	100	114	130	145
Student Services	100	112	121	132
Institutional Support	100	120	130	147
Plant Operation and Maintenance	100	116	126	140
Scholarships and Fellowships	100	106	122	132
Sub-total, Educational and General	100	111	122	133
Auxiliary Enterprises	100	108	118	128
Hospitals	100	118	134	128
Independent Operations	100	113	127	149
Total Expenditures[1]	100	111	122	133
Doctoral-Granting Universities				
Instruction	100	113	127	141
Research	100	104	115	118
Public Service	100	90	134	139
Academic Support	100	111	125	136
Student Services	100	113	118	134
Institutional Support	100	108	115	130
Plant Operation and Maintenance	100	115	126	141
Scholarships and Fellowships	100	108	126	149
Sub-total, Educational and General	100	111	124	137
Auxiliary Enterprises	100	109	118	127
Hospitals	100	119	150	193
Independent Operations	100	---	---	---
Total Expenditures[1]	100	111	125	139
Comprehensive Universities and Colleges				
Instruction	100	109	119	127
Research	100	108	113	136
Public Service	100	159	243	246
Academic Support	100	111	119	136
Student Services	100	107	117	128
Institutional Support	100	113	126	134
Plant Operation and Maintenance	100	112	120	134
Scholarships and Fellowships	100	110	126	138
Sub-total, Educational and General	100	110	120	131
Auxiliary Enterprises	100	111	118	127
Hospitals	100	---	---	---
Independent Operations	100	---	---	---
Total Expenditures[1]	100	110	120	130

TABLE 30 (Continued)

	Index Numbers: 1973-74 = 100			
	1973-74	1974-75	1975-76	1976-77
Liberal Arts Colleges I				
Instruction	100	107	115	123
Research	100	112	114	126
Academic Support	100	109	121	137
Student Services	100	112	122	128
Institutional Support	100	107	110	109
Plant Operation and Maintenance	100	110	123	138
Scholarships and Fellowships	100	107	119	128
Sub-total, Educational and General	100	108	117	126
Auxiliary Enterprises	100	109	117	127
Total Expenditures[1]	100	108	117	126
Liberal Arts Colleges II				
Instruction	100	105	117	129
Research	100	65	58	58
Academic Support	100	119	124	136
Student Services	100	107	118	127
Institutional Support	100	114	117	129
Plant Operation and Maintenance	100	114	123	137
Scholarships and Fellowships	100	119	139	140
Sub-total, Educational and General	100	110	120	131
Auxiliary Enterprises	100	108	121	127
Total Expenditures[1]	100	110	121	130
Two Year Colleges				
Instruction	100	109	124	134
Research	100	143	0	286
Academic Support	100	112	123	138
Student Services	100	110	126	141
Institutional Support	100	111	125	142
Plant Operation and Maintenance	100	112	125	137
Scholarships and Fellowships	100	118	128	141
Sub-total, Educational and General	100	111	126	140
Auxiliary Enterprises	100	111	121	132
Total Expenditures[1]	100	111	125	139

TABLE 30 (Continued)

	Index Numbers: 1973-74 = 100			
	1973-74	1974-75	1975-76	1976-77
Six Types of Institutions Combined				
Instruction	100	109	119	130
Research	100	107	110	125
Public Service	100	107	127	130
Academic Support	100	113	127	141
Student Services	100	111	120	132
Institutional Support	100	116	125	139
Plant Operation and Maintenance	100	114	124	137
Scholarships and Fellowships	100	108	124	136
Sub-total, Educational and General	100	111	122	133
Auxiliary Enterprises	100	109	118	128
Hospitals	100	114	128	132
Independent Operations	100	108	116	129
Total Expenditures[1]	100	111	122	133

[1] Includes mandatory transfers.

TABLE 31

PERCENTAGE DISTRIBUTION OF CURRENT FUND EXPENDITURES
1974-75 THROUGH 1976-77

	Percent of Total Expenditures[1]		
	1974-75	1975-76	1976-77
Research Universities			
Instruction	27%	27%	27%
Research	19	19	18
Public Service	1	1	1
Academic Support	10	10	10
Student Services	2	2	2
Institutional Support	6	6	6
Plant Operation and Maintenance	6	6	6
Scholarships and Fellowships	7	7	7
Sub-total, Educational and General	78	78	78
Auxiliary Enterprises	8	8	8
Hospitals	6	6	5
Independent Operations	9	9	10
Total Expenditures[2]	100%	100%	100%
Doctoral-Granting Universities			
Instruction	36	36	36
Research	8	8	7
Public Service	1	1	1
Academic Support	7	7	7
Student Services	4	4	4
Institutional Support	9	8	8
Plant Operation and Maintenance	8	7	7
Scholarships and Fellowships	6	6	7
Sub-total, Educational and General	79	79	78
Auxiliary Enterprises	14	13	13
Hospitals	7	8	9
Independent Operations	--	--	--
Total Expenditures[2]	100%	100%	100%
Comprehensive Universities and Colleges			
Instruction	37	37	36
Research	4	3	4
Public Service	1	1	1
Academic Support	6	6	7
Student Services	5	5	6
Institutional Support	11	12	11
Plant Operation and Maintenance	9	9	9
Scholarships and Fellowships	8	8	8
Sub-total, Educational and General	82	83	83
Auxiliary Enterprises	18	18	17
Hospitals	--	--	--
Independent Operations	--	--	--
Total Expenditures[2]	100%	100%	100%

TABLE 31 (Continued)

	Percent of Total Expenditures[1] 1974-75	1975-76	1976-77
Liberal Arts Colleges I			
Instruction	32%	32%	32%
Research	1	1	1
Academic Support	6	6	6
Student Services	7	8	7
Institutional Support	12	12	12
Plant Operation and Maintenance	9	10	10
Scholarships and Fellowships	9	9	9
Sub-total, Educational and General	78	78	78
Auxiliary Enterprises	22	22	22
Total Expenditures[2]	100%	100%	100%
Liberal Arts Colleges II			
Instruction	28	29	29
Research	--	--	--
Academic Support	6	5	5
Student Services	8	8	8
Institutional Support	15	14	14
Plant Operation and Maintenance	8	8	9
Scholarships and Fellowships	9	10	9
Sub-total, Educational and General	77	76	77
Auxiliary Enterprises	23	24	23
Total Expenditures[2]	100%	100%	100%
Two-Year Colleges			
Instruction	30	30	30
Research	--	--	--
Academic Support	7	7	7
Student Services	9	9	9
Institutional Support	14	14	14
Plant Operation and Maintenance	11	11	11
Scholarships and Fellowships	5	4	4
Sub-total, Educational and General	77	77	78
Auxiliary Enterprises	24	23	23
Total Expenditures[2]	100%	100%	100%

TABLE 31 (Continued)

	Percent of Total Expenditures[1] 1974-75	1975-76	1976-77
Six Types of Institutions Combined			
Instruction	30%	30%	30%
Research	13	13	12
Public Service	1	1	1
Academic Support	9	8	9
Student Services	4	4	4
Institutional Support	8	8	8
Plant Operation and Maintenance	7	7	7
Scholarships and Fellowships	7	7	7
Sub-total, Educational and General	78	78	78
Auxiliary Enterprises	12	12	12
Hospitals	5	5	4
Independent Operations	5	5	6
Total Expenditures[2]	100%	100%	100%

[1] Percents may not add to 100 due to rounding.

[2] Includes mandatory transfers.

of average wages and salaries for the national labor force and the competitive position of higher education in the labor market deteriorated.[1] Moreover, there was little room for improvement in educational programs and quality except as these could be squeezed into constrained budgets.

2. The distribution of revenues from various sources remained relatively consistent over the past three years. Notable and probably unfavorable changes, however, were the slowly increasing percentage derived from tuition and the slowly declining percentage from the federal government and from endowment income. One disturbing change in the case of Liberal Arts Colleges I was the rather abrupt increase (from 10 to 14) in the percentage of total revenue derived from private gifts. Also, the "trend consensus" analysis suggests that the position of a few institutions has deteriorated.

3. The allocation of expenditures among various purposes has been stable and suggests that annual budgeting occurs on the basis of across-the-board increases. There is no evidence of changes in budgetary allocation because of financial stringency.

4. The financial situation in recent years as revealed by data on the current fund has changed, if at all, only minutely. There are a few signs of greater stringency and few, if any, indications of marked improvement.

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[1] See Howard R. Bowen, Academic Compensation. New York: Teachers Insurance and Annuity Association and College Retirement Equities Fund, 1978.

CHAPTER VI

UNDERGRADUATE STUDENT FINANCIAL AID

All colleges and universities are dependent on the enrollment of students for a major portion of their operating revenues. In the case of public institutions students bring with them substantial tuition payments and also they give rise to legislative appropriations which are almost always heavily influenced by enrollments. In the case of independent institutions, students bring with them the bulk of the operating revenue in the form of tuitions. Enrollments--though by no means the sole source of revenue--may be said to be the financial foundation of both public and independent higher education, and the pressure to attract students in a highly competitive market is intense. Enrollments, in turn, are strongly influenced by financial aid to students. Especially is this so in the independent sector where tuition rates are likely to be two to five times what they are in public institutions.

Student aid funds flow to independent colleges and universities from a variety of outside sources. Many institutions also receive endowment income and current gifts which are designated for student aid. Finally, most independent colleges and universities pay out substantial amounts of student aid from their unrestricted funds. Thus, all colleges and universities, but particularly those in the independent sector, are increasingly dependent on income flowing to the institutions from student financial aid programs. And because of the intense pressure to attract students in a highly competitive market, some institutions are led or forced to pay large sums of student aid out of unrestricted funds and to jeopardize the funds needed for regular operations. With these concerns in mind, we have examined in detail the flow of funds from major sources of student financial assistance and their possible impact on institutional finance.

We have made considerable effort to obtain accurate and reliable data on student aid; but as anyone who has made the attempt will realize, the difficulties are enormous. There are innumerable sources of funds, some from outside the institutions, some from restricted funds under the control of the institution, and some from unrestricted funds of the institution. For different programs there are varying degrees of administrative involvement on the part of the institutions. And institutions vary in their ability to identify and untangle the various sources of funds. For example, some institutions are unable to separate endowment income for student aid from gifts for student aid. Some have special difficulty in identifying expenditures of unrestricted general funds to cover student aid commitments. Student loan totals are also subject to some ambiguity. Not all institutions can obtain records of federally insured or guaranteed student loans made by other lenders. Also, many institutions seem unable to report the number of students who have received

support from specific sources or the number of unduplicated recipients who have received aid from any or all sources.

Despite all these problems, we are reporting our findings as the best available information on the impact of student aid on the institutions. We are, however, missing important information about how student aid funds are "packaged" for individual students; that is, how funds from different sources are combined to provide the amount of aid to meet individual students' needs. A study of student aid recipients now in progress at the National Association of Independent Colleges and Universities should provide such additional information.

Student Aid Terminology

Grants: aid for which no work or repayment is expected.

Work-study: aid for which the student is expected to exchange labor.

Loans: aid, usually at preferred interest rates, which the student is expected to repay.

State Aid: grants awarded or funded by a state.

BEOG: Basic Economic Opportunity Grant, a federal grant program.

SEOG: Supplemental Economic Opportunity Grant, a federal program providing campus-based student aid with awards determined by the institution.

LEEP: Law Enforcement Education Program, a federal program.

Unfunded Aid: aid expenditures from general unrestricted institutional funds.

CWSP: College Work-Study Program of which 80 percent is financed by the federal government and 20 percent by institutional matching funds.

Student Payroll: students employed by the institution.

NDSL: National Direct Student Loans, 89 percent financed by the federal government and 11 percent by institutional matching funds.

FISL: Federally Insured Student Loans, a federal program insuring money loaned by other lenders.

GSL: Guaranteed Student Loan, a federal program.

The Data

The data are presented in tables 32 to 38. Table 32 shows the median percentages of student aid, by sources, for the years 1975-76 and 1976-77. Referring to the combined figures for all types of institutions and to 1976-77 (the far right-hand column), one perceives that student aid was dispensed through a wide variety of programs, no one of which was dominant and most of which were significant in amount. However, in the median institution, roughly two-fifths of student aid were financed from institutional funds, two-fifths from the federal government, and the

TABLE 32

PERCENTAGE DISTRIBUTION OF STUDENT AID DOLLARS BY PROGRAMS, MEDIAN INSTITUTIONS, 1975-76 AND 1976-77[1]

	Research and Doctoral-Granting Universities		Comprehensive Universities and Colleges		Liberal Arts Colleges I		Liberal Arts Colleges II		Two-Year Colleges		Five Types of Institutions Combined	
	1975-76	1976-77	1975-76	1976-77	1975-76	1976-77	1975-76	1976-77	1975-76	1976-77	1975-76	1976-77
Institutional Sources:												
1. Endowment, gifts	13.2%	15.9%	5.2%	5.7%	23.9%	25.0%	7.3%	8.5%	10.2%	10.4%	11.5%	10.7%
2. Unrestricted general funds	14.9	13.9	21.3	19.7	24.9	20.4	11.2	10.8	4.7	7.7	18.9	16.6
3. Student payroll	9.9	9.7	6.2	6.0	6.8	9.2	4.4	3.7	5.5	5.2	6.4	6.1
4. Institution loans	1.2	.5	1.3	1.4	1.2	1.1	.7	.2	1.9	1.8	1.2	1.1
5. FISL/GSL from institution funds	2.2	2.9	5.5	12.5	6.3	7.8	8.3	3.9	---	---	3.6	5.1
All institutional sources[2]	52.4	52.9	40.3	40.4	53.2	51.7	25.9	21.6	25.3	27.3	40.1	37.6
State Sources:												
6. Local state	6.6	7.4	18.0	17.4	7.8	8.9	16.7	13.3	12.0	9.4	12.8	11.6
7. Other states	.5	.9	.5	.4	.8	.7	.3	.3	.3	---	.5	.5
All state sources	5.9	7.2	16.9	17.9	5.9	8.5	13.8	11.9	12.1	9.9	12.2	11.2
Federal Sources:												
8. BEOG	4.4	6.3	9.4	13.5	5.4	8.0	14.0	19.0	28.8	30.9	9.4	13.4
9. SEOG	2.2	2.4	5.0	4.0	3.2	3.7	7.7	6.9	5.3	4.7	4.4	4.2
10. LEEP	1.2	.8	1.7	1.2	---	---	---	---	---	---	1.6	1.1
11. College work-study[3]	4.6	5.3	5.7	5.8	5.8	4.8	9.5	9.3	9.5	9.2	6.8	6.9
12. NDSL[4]	14.6	14.2	13.3	11.8	11.7	10.0	11.1	8.9	10.7	8.6	12.6	11.3
All federal sources[5]	28.4	35.6	33.7	36.6	23.6	24.2	44.8	44.9	56.7	56.3	33.7	37.1
All Other Funded Grants	1.5	1.1	2.4	2.3	6.0	7.2	1.4	.9	.9	.9	2.4	2.2

[1] All funds: grants, loans, and work from all sources known to the institutions.

[2] Includes lines 1, 2, 3, 4, 5, 20 percent of line 11, and 11 percent of line 12.

[3] Includes 20 percent institutional share.

[4] Includes 11 percent institutional matching funds.

[5] Includes lines 8, 9, 10, 80 percent of line 11, and 89 percent of line 12.

balance from state and other sources. The most important single sources were unrestricted funds of institutions (11 percent), restricted funds of institutions derived from endowment income and current gifts (17 percent), state programs (12 percent), federal Basic Educational Opportunity Grants (13 percent), and federal National Direct Student Loans (11 percent).

Table 32 also shows the wide differences among the five types of institutions in sources of student aid in 1976-77. Institutional funds bear a much heavier part of the load in the case of the Research and Doctoral-Granting Universities and Liberal Arts Colleges I than in the Comprehensive Universities and Colleges, Liberal Arts Colleges II, and the Two-Year Colleges. In the latter three types of institutions, federal and state funds carry roughly two-thirds of the load. For these institutions, the federal and state programs are enormously important. The Research and Doctoral-Granting Universities and Liberal Arts Colleges I depend relatively more on their own resources to finance student aid, not because they want it that way, but because they have no alternative. Their relatively high tuitions necessitate heavy amounts of student aid. Public programs do not suffice and they must raise substantial amounts of their own funds to insure attracting adequate numbers of students and a diversified student population. The need to raise large amounts of student aid funds puts them under considerable strain.

Shifting attention to the change in the percentage distribution over the two years, as shown in table 32, it will be noted that the federal share increased (primarily because of the more ample funding of the BEOGs) and that the institutional and state percentages decreased. This shift illustrates how the growth of federal financing of student aid relieves institutional budgets. What these data do not show is that without the growing federal student aid programs, the number of students in college would undoubtedly be smaller and that the tuition income of the institutions would be correspondingly constricted.

Table 33 provides additional detail, for all types of institutions combined, on student financial aid. The data are in all cases for median institutions. These figures show that from 1975-76 to 1976-77 financial assistance grew by 13 percent. Part of this growth (3 percentage points) was due to an increase in the number of recipients and the balance (8 percentage points) to an increase in the average award.[1] A substantial part of the increase was financed from federal funds. Total student aid from all sources in 1976-77 was a whopping 25 percent of total Educational and General Expenditures; this aid was granted to 49 percent of the student population (head count); and the average award by the median institution was $1,894 per recipient which amounted to 42 percent of the average student budget. The median of average awards granted by institutions ranged from $585 to $4,295, the difference reflecting different costs of attendance and different circumstances of student bodies.

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[1] Because the data are in the form of medians, components do not necessarily add to totals.

TABLE 33

SELECTED ASPECTS OF STUDENT FINANCIAL AID BY PROGRAMS, MEDIAN INSTITUTIONS, ALL TYPES OF INSTITUTIONS, 1975-76 AND 1976-77

	% Change in Total Dollars 1975-6/1976-7	% of E&G Expenditures 1976-77	Recipients as % of Head Count 1976-77	% Change in Recipients 1975-6/1976-7	Average Award per Recipient 1976-77	% Change in Average Award 1975-6/1976-7	Avg. Award as % of Avg. Student Budget 1976-77
Total Financial Assistance[1]	13%	25%	49%[2]	3%	$ 1,894	8%	42%
Institutional Sources:							
1. Endowment, gifts	9	3	13	6	692	4	17
2. Unrestricted general funds	5	4	16	3	940	18	20
3. Student payroll	8	2	12	6	448	5	10
4. Institution loans	0	*	1	0	689	*	14
5. FISL/GSL from institution funds	20	1	5	8	1,262	1	25
All institutional sources[3]	8	10	75[4]	4	419	5	10
State Sources:							
6. Local state	9	3	12	6	875	*	17
7. Other states	9	*	1	11	600	-3	12
All state sources	10	3	12	6	795	*	16
Federal Sources:							
8. BEOG	51	3	11	53	895	*	18
9. SEOG	2	1	6	5	607	-1	14
10. LEEP	-3	*	1	-1	724	-3	13
11. College work study[5]	9	1	11	3	493	5	11
12. NDSL[6]	4	3	13	3	735	2	16
All federal sources[7]	20	9	46[4]	15	674	4	14
All other grants	1	*	3	4	929	3	18

[1] All funds: grants, loans, and work from all sources known to the institutions.

[2] Unduplicated recipients.

TABLE 33 (Continued)

[3]Includes lines 1, 2, 3, 4, 5, 20 percent of line 11, 11 percent of line 12.

[4]Percentage of recipients receiving aid in any form.

[5]Includes 20 percent institutional share.

[6]Includes 11 percent institutional matching funds.

[7]Includes lines 8, 9, 10, 80 percent of line 11, 89 percent of line 12.

*Between 0.1 and 0.5 percent.

Tables 34 through 38[1] provide information for each of the five types of institutions, comparable to that in table 33. As shown in these tables, there are substantial differences in the student aid situation among the several types of institutions. These may be conveniently summarized in the following figures (medians) from tables XI to XV in Appendix A:

	Aid as a % of Expenditure	Recipients as a % of Enrollment (Head Count)	Average Award per Recipient	Average Award as % of Average Student Budget	% of Aid from Institutional Sources
Research and Doctoral-Granting Universities	14%	30%	$ 2,842	44%	53%
Comprehensive Universities and Colleges	22	36	1,676	38	40
Liberal Arts Colleges I	21	49	2,309	46	52
Liberal Arts Colleges II	36	70	1,889	47	22
Two-Year Colleges	34	47	1,550	38	27

The position of the median Liberal Arts Colleges II is of special interest: student aid equals 36 percent of its budget, is granted to 70 percent of its students, and only 22 percent is derived from institutional sources. It is easy to see that the public student aid programs are vital to these institutions. On the other hand, the median Universities and Liberal Arts Colleges I pay more than half their student aid costs from their own funds.

Conclusions

The dramatic development of student aid over recent decades has had a profound impact on all of American higher education and especially on the independent sector. The recent decision of the federal government to enter the field in a big way has resulted in a massive flow of federal funds to the institutions via students. It has enabled the independent institutions to stabilize their own expenditures for student aid as a percentage of total student aid and to reduce the share from unrestricted institutional funds. Recent developments on the student aid front have on the whole been favorable to financial progress of the institutions.

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[1] Tables 34 through 38, see chapter VII.

CHAPTER VII

ASSETS, LIABILITIES, AND NET WORTH

In this chapter, we present data on the balance sheets of independent colleges and universities. The data include assets, liabilities, and fund balances. The latter represents assets minus liabilities, and corresponds to net worth in a profit-making enterprise. The data were obtained from careful analysis of the audited financial statements of the sample of institutions and were weighted to produce estimates for the entire population of independent institutions. We were able to produce comparable data for all fiscal years from 1969-70 through 1976-77.

Trends in Assets, Liabilities and Fund Balances

Changes in the consolidated balance sheets of our expanded sample of institutions are shown in table 34. Over the period since 1969-70 total and net assets increased by 43 percent. During the same period the Consumer Price Index increased by 56 percent. Thus it is clear that the book value of assets failed to keep pace with inflation. This conclusion is not surprising since most assets are carried on the books at original acquisition value, not revalued in current dollars. One should not expect the dollar figures to grow in proportion to increases in the price level.

The liabilities shown in balance sheets are fixed obligations and the dollar amounts do not change with fluctuations in the price level. As a result, in an inflationary period the relative burden of any given amount of debt tends to decline. The growth of liabilities over the seven-year period was slower than the rate of inflation and also a bit slower than the growth in assets at book value, and so the net position of the institutions probably improved (table 34). As a result, fund balances (roughly comparable to net worth) increased somewhat more rapidly than assets reflecting a slight gain in the percentage of assets owned by the institutions without encumbrance. However, the pronounced upward trend in current liabilities and in interfund borrowing suggest that there may have been increasing cash flow problems.

Aggregate figures, particularly in view of the large amounts of assets and liabilities associated with just a few universities, tend to hide balance sheet changes for different types of institutions. Tables 35 to 41 show seven-year trends in assets, liabilities, and net worth for each of the six types of institutions. These tables are summarized by the following index numbers for 1976-77 (1969-70 = 100):

	Net Assets	Interfund Borrowing	Total Liabilities	Current Liabilities	Fund Balances
Research Universities	139	240	246	212	132
Doctoral-Granting Universities	143	116	134	131	144
Comprehensive Universities and Colleges	144	96	118	147	152
Liberal Arts Colleges I	142	105	112	140	145
Liberal Arts Colleges II	148	204	135	189	155
Two-Year Colleges	156	404	139	302	166
All Six Types Combined	143	143	140	175	144

These figures suggest that over the past seven years the financial position of three types of institutions may have been deteriorating: the Research Universities, the Liberal Arts Colleges II, and the Two-Year Colleges. These institutions appear to have experienced relatively high increases in interfund borrowing and relatively rapid growth of current liabilities. The Research Universities also showed a relatively small increase in net assets.

To get a bearing on more recent trends, similar comparisons may be made for the past two years between data for 1976-77 and 1974-75. Index numbers for 1976-77 (with 1974-75 = 100), as computed from the data in tables 35 to 41, are as follows:

	Net Assets	Interfund Borrowing	Total Liabilities	Current Liabilities	Fund Balances
Research Universities	110	137	118	99	110
Doctoral-Granting Universities	110	117	113	130	110
Comprehensive Universities and Colleges	108	132	100	117	112
Liberal Arts Colleges I	113	96	98	111	114
Liberal Arts Colleges II	110	108	108	126	112
Two-Year Colleges	108	117	97	109	104
All Six Types Combined	110	112	106	114	112

In evaluating these figures, it may be helpful to take note of the Consumer Price Index which rose 13 percent during the two-year period 1974-75 to 1976-77. The differences among the types of institutions were less extreme in the recent two-year period than over the longer seven-year period. The notable changes were the relatively large increase in interfund borrowing on the part of the Research Universities and the Comprehensive Universities and Colleges; the high increase in total liabilities among the Research and Doctoral-Granting Universities; and the large increase in current liabilities among the Doctoral Granting Universities and the Liberal Arts Colleges II; and the small increase in fund balances among the Two-Year Colleges.

TABLE 34

CHANGE IN ASSETS, LIABILITIES, AND FUND BALANCES, ALL TYPES OF INSTITUTIONS COMBINED, END OF FISCAL YEARS 1969-70 TO 1976-77
(Index Numbers: 1969-70 = 100)

	1969-70	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77
Assets:								
Current	100	108	118	128	139	146	154	168
Endowment	100	104	111	118	121	121	127	136
Plant	100	106	113	118	125	130	136	140
Other	100	113	125	137	147	159	172	187
Total Assets	100	106	113	119	126	130	136	143
Interfund Borrowing	100	106	123	125	143	128	138	143
Net Assets	100	106	113	119	125	130	136	143
Liabilities:								
Current	100	109	118	131	141	153	169	175
Plant	100	106	116	117	122	123	126	126
Other	100	121	133	146	169	174	185	201
Total Liabilities	100	108	118	121	129	132	138	140
Fund Balances:								
Current	100	106	117	124	136	139	137	159
Endowment	100	104	111	117	120	120	126	136
Plant	100	106	112	118	125	132	138	144
Loan	100	113	127	142	151	163	176	185
Annuity and Life Income	100	115	124	131	139	156	172	193
Total Fund Balances	100	106	112	119	125	129	136	144

TABLE 35

CHANGES IN ASSETS, LIABILITIES, AND FUND BALANCES, RESEARCH UNIVERSITIES, END OF FISCAL YEARS, 1969-70 TO 1976-77
(Index Numbers: 1969-70 = 100)

	1969-70	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77
Assets:								
Current	100	109	115	125	142	160	157	157
Endowment	100	105	111	116	115	117	122	130
Plant	100	105	112	117	121	126	135	140
Other	100	112	122	136	146	160	176	191
Total Assets	100	106	112	118	122	126	133	140
Interfund Borrowing	100	106	132	152	152	175	221	240
Net Assets	100	106	112	118	121	126	132	139
Liabilities:								
Current	100	124	127	150	157	214	227	212
Plant	100	118	178	198	225	235	295	320
Other	100	110	120	142	148	165	175	184
Total Liabilities	100	118	145	166	181	208	238	246
Fund Balances:								
Current	100	104	110	116	137	141	132	138
Endowment	100	105	111	115	115	116	121	130
Plant	100	104	107	112	115	119	124	129
Loan	100	117	131	149	162	178	198	216
Annuity and Life Income	100	106	109	113	127	144	161	173
Total Fund Balances	100	105	110	114	117	120	125	132

TABLE 36

CHANGE IN ASSETS, LIABILITIES, AND FUND BALANCES, DOCTORAL-GRANTING UNIVERSITIES, END OF FISCAL YEARS 1969-70 TO 1976-77
(Index Numbers: 1969-70 = 100)

	1969-70	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77
Assets:								
Current	100	101	113	107	106	113	135	135
Endowment	100	104	110	118	124	120	126	133
Plant	100	106	112	117	125	133	138	144
Other	100	106	116	137	150	164	179	193
Total Assets	100	105	112	117	124	128	136	142
Interfund Borrowing	100	81	113	95	97	99	116	116
Net Assets	100	106	112	118	125	130	137	143
Liabilities:								
Current	100	94	102	92	90	101	129	131
Plant	100	103	110	107	121	128	130	133
Other	100	99	92	125	185	133	198	171
Total Liabilities	100	100	107	103	113	119	133	134
Fund Balances:								
Current	100	121	143	145	147	147	150	145
Endowment	100	104	111	118	123	121	126	134
Plant	100	107	112	120	126	134	141	147
Loan	100	111	127	148	158	167	181	195
Annuity and Life Income	100	94	97	116	130	133	141	152
Total Fund Balances	100	106	113	121	127	131	137	144

TABLE 37

CHANGE IN ASSETS, LIABILITIES, AND FUND BALANCES, COMPREHENSIVE UNIVERSITIES AND COLLEGES, END OF FISCAL YEARS 1969-70 TO 1976-77
(Index Numbers: 1969-70 = 100)

	1969-70	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77
Assets:								
Current	100	100	112	124	138	129	137	143
Endowment	100	99	107	108	114	116	122	134
Plant	100	108	116	122	126	133	137	142
Other	100	111	125	140	151	162	173	185
Total Assets	100	106	115	120	126	131	136	143
Interfund Borrowing	100	99	104	75	91	73	93	96
Net Assets	100	106	115	122	127	133	138	144
Liabilities:								
Current	100	90	104	110	125	126	139	147
Plant	100	109	117	115	116	116	114	112
Other	100	124	126	148	165	117	121	130
Total Liabilities	100	106	115	115	118	118	118	118
Fund Balances:								
Current	100	125	134	163	174	137	131	134
Endowment	100	99	106	107	114	118	123	137
Plant	100	108	115	124	131	140	147	154
Loan	100	113	127	142	153	164	177	189
Annuity and Life Income	100	103	113	118	122	124	133	144
Total Fund Balances	100	106	114	122	129	136	143	152

TABLE 38

CHANGE IN ASSETS, LIABILITIES AND FUND BALANCES, LIBERAL ARTS COLLEGES I, END OF FISCAL YEARS 1969-70 TO 1976-77
(Index Numbers: 1969-70 = 100)

	1969-70	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77
Assets:								
Current	100	107	141	150	154	157	162	243
Endowment	100	103	111	122	125	118	124	133
Plant	100	107	113	118	122	127	132	135
Other	100	110	119	117	129	143	156	171
Total Assets	100	105	114	121	125	125	131	140
Interfund Borrowing	100	104	119	127	142	109	107	105
Net Assets	100	105	113	120	124	126	132	142
Liabilities:								
Current	100	114	133	155	163	126	128	140
Plant	100	108	111	110	112	110	110	105
Other	100	116	135	173	163	149	139	144
Total Liabilities	100	109	115	119	121	114	114	112
Fund Balances:								
Current	100	99	151	144	145	190	201	359
Endowment	100	103	111	121	125	118	124	133
Plant	100	106	114	120	125	132	138	144
Loan	100	111	122	132	141	152	162	171
Annuity and Life Income	100	108	117	102	115	136	155	175
Total Fund Balances	100	105	113	121	125	127	134	145

TABLE 39

CHANGE IN ASSETS, LIABILITIES, AND FUND BALANCES, LIBERAL ARTS COLLEGES II, END OF FISCAL YEARS 1969-70 TO 1976-77
(Index Numbers: 1969-70 = 100)

	1969-70	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77
Assets:								
Current	100	108	108	120	125	126	144	152
Endowment	100	106	116	123	140	150	159	175
Plant	100	104	110	114	126	130	135	140
Other	100	120	135	154	160	170	180	196
Total Assets	100	106	113	119	130	135	142	149
Interfund Borrowing	100	127	139	153	200	189	188	204
Net Assets	100	105	112	118	129	134	141	148
Liabilities:								
Current	100	115	116	132	142	150	170	189
Plant	100	101	110	108	116	115	118	117
Other	100	191	223	159	281	311	319	403
Total Liabilities	100	105	114	113	124	125	131	135
Fund Balances:								
Current	100	88	83	85	77	58	68	44
Endowment	100	104	113	122	135	144	152	168
Plant	100	105	110	117	130	135	143	150
Loan	100	111	127	142	148	160	169	171
Annuity and Life Income	100	157	177	228	222	243	263	305
Total Fund Balances	100	106	112	120	133	139	146	155

TABLE 40

CHANGE IN ASSETS, LIABILITIES, AND FUND BALANCES, TWO-YEAR COLLEGES,
END OF FISCAL YEARS 1969-70 TO 1976-77
(Index Numbers: 1969-70 = 100)

	1969-70	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77
Assets:								
Current	100	149	161	189	201	235	275	274
Endowment	100	109	112	124	130	134	136	137
Plant	100	110	117	127	135	143	147	152
Other	100	113	128	143	150	161	181	187
Total Assets	100	112	119	131	139	148	154	159
Interfund Borrowing	100	141	255	295	295	345	400	404
Net Assets	100	112	118	129	137	145	151	156
Liabilities:								
Current	100	123	165	180	211	276	300	302
Plant	100	115	111	121	120	118	111	107
Other	100	97	105	73	93	162	185	208
Total Liabilities	100	116	120	130	134	143	142	139
Fund Balances:								
Current	100	205	152	210	178	143	218	209
Endowment	100	110	113	125	131	134	136	136
Plant	100	108	119	129	140	151	159	167
Loan	100	114	131	137	150	161	182	191
Annuity and Life Income	100	101	100	214	165	165	175	162
Total Fund Balances	100	111	119	131	140	149	159	166

Our data suggest that there were symptoms of financial deterioration. These showed up in different forms for different types of institutions. In some cases the symptoms were exceptional increases in interfund borrowing[1] or rapid growth of liabilities--especially current liabilities. In one case the symptom was unusually slow growth of fund balances (Two-Year Colleges). On the other hand, the evidence is not all negative. Most types of institutions performed creditably with respect to most of the criteria. Specifically, most types made reasonably good gains in assets and in fund balances--both over the past seven years and during the past two years as well.

Table 41 displays data on the percentage distribution of assets, liabilities, and fund balances. As we discovered in previous years' studies, this distribution remains quite stable from year to year. As indicated for most types of institutions current assets as a percentage of total assets declined slightly, endowment increased, and plant declined a bit. Similarly, for most types of institutions, current liabilities as a percentage of total liabilities increased, though for all institutions combined, current liabilities declined percentagewise.

Conclusions

The balance sheet analysis did not yield any dramatic results. The following conclusions might be drawn from it:

1. Over recent years, the growth in assets did not keep pace with inflation. This is understandable in view of the fact that the bulk of assets are carried at book value and are not adjusted from year to year for changes in the price level.

2. The overall trend is toward debt reduction, that is to say, assets grew somewhat more rapidly than liabilities. Current liabilities, however, increased a bit more rapidly than assets.

3. The slow, steady trend toward increasing fund balances (net worth) continued in recent years at the rate of about 5 percent a year.

4. For some types of institutions, some possible weaknesses showed up. These pertained chiefly to growth of current liabilities and of interfund borrowing.

5. The changes in assets, liabilities, and net worth were small during 1975-76. Our main impression is one of stability. On the basis of these data one could not say that private higher education on the whole is gaining ground; neither could one say positively that it is losing ground.

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[1] Interfund borrowing, however, is sometimes an indication of good cash management rather than financial weakness.

TABLE 41

PERCENTAGE DISTRIBUTIONS OF ASSETS, LIABILITIES, AND FUND BALANCES, BY TYPES OF INSTITUTIONS, END OF FISCAL YEARS 1975-76 AND 1976-77

	Research Universities		Doctoral-Granting Universities		Comprehensive Universities and Colleges		Liberal Arts Colleges I		Liberal Arts Colleges II		Two-Year Colleges		All Types of Institutions	
	1975-1976	1976-1977	1975-1976	1976-1977	1975-1976	1976-1977	1975-1976	1976-1977	1975-1976	1976-1977	1975-1976	1976-1977	1975-1976	1976-1977
Assets:														
Current	9.9	9.4	9.9	9.5	6.3	6.2	5.0	6.9	7.2	7.1	9.8	9.5	8.8	8.6
Endowment	40.1	40.7	28.5	28.8	16.9	17.8	38.5	38.5	15.8	16.3	8.2	8.2	34.0	34.5
Plant	44.0	43.7	55.6	55.6	69.7	68.7	50.4	48.3	67.8	67.2	77.4	77.8	51.0	50.4
Other	6.1	6.2	6.0	6.1	7.1	7.3	6.2	6.3	9.2	9.4	4.6	4.6	6.3	6.5
Total Assets	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Interfund Borrowing	1.5	1.5	3.5	3.3	1.9	1.8	3.5	3.2	3.6	3.7	3.2	3.2	2.1	2.1
Net Assets	98.5	98.5	96.5	96.7	98.1	98.2	96.5	96.8	96.4	96.3	96.8	96.8	197.9	97.9
Liabilities:														
Current	31.5	28.5	33.9	34.0	20.2	21.3	17.5	19.5	23.5	24.4	33.9	35.0	28.1	27.2
Plant	48.0	50.5	59.1	60.1	77.3	76.1	79.1	77.0	72.6	71.0	64.8	63.6	60.1	60.7
Other	20.6	21.0	7.0	6.0	2.5	2.6	3.3	3.5	3.9	4.6	1.3	1.4	11.8	12.0
Total Liabilities	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Fund Balances:														
Current	6.9	6.8	3.8	3.5	2.3	2.1	3.3	5.4	1.7	1.3	3.1	2.9	5.3	5.4
Endowment	45.3	45.9	34.9	35.4	21.6	22.5	43.5	43.1	20.1	21.0	10.4	10.1	39.7	40.2
Plant	43.5	42.8	54.8	54.5	67.5	66.7	46.6	44.8	66.2	65.8	80.9	81.4	49.3	48.6
Loan	3.5	3.6	4.6	4.7	7.5	7.5	3.5	3.4	10.0	9.8	5.0	5.0	4.3	4.4
Annuity and Life Income	.9	.9	2.0	2.0	1.2	1.2	3.1	3.3	2.0	2.1	.5	.5	1.3	1.4
Total Fund Balance	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

CHAPTER VIII

FINANCIAL RATIOS

A great deal of effort has been focused in recent years on the discovery of ratios or formulas which would reveal quickly and accurately the financial condition of colleges and universities. We have moved cautiously in the development and use of such ratios.

The condition of any institution or groups of institutions rests on many intangible factors which defy quantification. The ability of a college or university to survive and to progress depends, for example, on the capacity to attract students, the latent ability to raise money, the qualifications and loyalty of faculty and staff, the quality and commitment of the board and administrative leaders, the public reputation, the excellence of the program, the capacity to adjust to changing social conditions affecting the educational mission and methods, the condition of the physical plant, the willingness of constituencies to rise to emergencies, etc., etc. These intangible factors are reflected imperfectly if at all in accounting statements expressed in dollars. Yet these intangibles are true assets of an institution. Without these intangibles, an institution would be derelict regardless of its financial data and despite the various ratios that may be derived from them. With these intangibles, an institution may survive and progress even though the financial data may show that it is bankrupt. Indeed, in the four years we have been studying the independent sector, we have learned that colleges and universities have enormous intangible reserves which account for their remarkable staying power. Therefore, we have tried to temper our financial data with other kinds of information reflecting these intangible factors.

Even a seemingly simple concept such as "operating deficit" or "operating surplus" as an indicator of financial distress or soundness, is not as straightforward as frequently assumed. The amount of deficits or surpluses is often determined by managerial decisions or governing board rules as to the allocation of gifts between current operations on the one hand and capital, endowment, or reserves on the other. Frequently, institutions show deficits in the same year when they accumulate large reserves or capital or endowment funds; or they show surpluses in the same year when they draw down capital through failure to provide adequate reserves.

An important question relating to the interpretation of deficits is the amount of current gifts that may be prudently assigned to current operating revenues. In table 28 (p. 55), we show that in 1975-76 the six groups of institutions obtained the following percentages of total revenues from private gifts:

Research Universities	10%
Doctoral-Granting Universities	8
Comprehensive Universities and Colleges	7
Liberal Arts Colleges I	14
Liberal Arts Colleges II	12
Two-Year Colleges	24

The judgment of the authors is that substantial dependence or a large increase in dependency on current giving may be a signal of possible financial weakness. Such dependency may invite future trouble if economic conditions should worsen or if the attitudes of donors should turn sour. It may represent a mortgaging of the future because it diverts fund-raising efforts from the accumulation of endowment and physical capital. However, we are not prepared to argue that institutions should use no gift income for current operations, and we recognize that prudent amounts may vary among institutions according to the commitment and dependability of their donors and according to the amount of resources held in reserve.

In addition to the conceptual pitfalls in the use of conventional accounting magnitudes and ratios, a second reason for caution in their use is more mundane. It is that such data, no matter how much care is devoted to their collection and refinement, are likely to have a considerable residue of inaccuracy and inadequacy. This is especially so when ratios or formulas use two or more kinds of data which in combination may be more erroneous than any one kind of data used singly.

Despite these caveats, dollar magnitudes and ratios--when used in moderation and when the limitations are understood--can be helpful in appraising the condition of colleges and universities. For example, surpluses or deficits are not wholly meaningless. Most institutions try very hard to balance their current budgets. A deficit is usually (though not always) a sign of at least temporary stringency. And persistent deficits are almost always a sign of financial distress. Similarly, ratios of liabilities to the assets to pay them off may be significant. But such data never tell the whole story, and their interpretation in a mechanical fashion can be misleading. Just as no experienced businessman would acquire a company merely by reading its accounting statements (without reference to its earning power, patents, technological know-how, market position, quality of management, labor relations, competition, etc.), no observer of higher education would judge the condition of any college or university merely on the basis of its financial records. Nevertheless, we have been gradually refining the art of financial data acquisition for academic institutions and have introduced in each of our reports a few financial ratios. With this fourth report, we venture a step further in what remains a primitive art of financial analysis in higher education.

Selected Financial Ratios: Trends

In tables 42 through 48, we present several financial ratios for the six types of institutions and for all types combined and covering the

years 1973-4 through 1976-77. In the following paragraphs, we describe the several ratios and comment on the inferences to be drawn from them.

Total Assets to Total Liabilities. This ratio reflects the degree to which institutions hold equity in their assets, and correlates negatively with the degree of their indebtedness. As shown in line 1 of tables 42 to 48, this ratio has been improving slowly for all types of institutions combined and also for each type except the Research Universities.

Current Assets to Current Liabilities. This ratio (shown in line 2 of the tables) measures the ability of the institution to pay off liabilities that will mature soon by means of assets that can be readily liquidated. This ratio has been rising for all types of institutions combined and for each type separately except for Research and Doctoral-Granting Universities. For these, the ratio has behaved erratically.

Liquid Assets to Current Liabilities. A variant of the current ratio is similar to the "acid test" ratio used in business. It relates liquid assets in the current fund, the plant fund, and reserve funds to current external liabilities (line 3). For all types of institutions combined, this ratio has been improving. This can be said also of all the six types of institutions, except in the case of the Research and Doctoral-Granting Universities the trend has been somewhat erratic.

Net Revenue Ratio. This is a ratio of net operating revenue to total operating revenue. Net operating revenue is total revenue minus total expenditures. Thus, this ratio, if positive, indicates a surplus and if negative, a deficit. The ratio is computed for all operating revenues (line 4) and also for those revenues relating to Educational and General Expenditures (line 5). As shown in table 42, the trend has been upward, but the total net revenue ratio declined sharply in 1976-77 and the E&G net revenue ratio declined slightly in that year. For the six types of institutions the trend has been mixed over the years 1973-74 to 1975-76, and was predominantly downward in 1976-77. However, no group of institutions reported a negative ratio, indicating a deficit in 1976-77, though of course some institutions individually may have experienced deficits.

TABLE 42

SELECTED FINANCIAL RATIOS, MEDIAN INSTITUTIONS,
END OF FISCAL YEARS 1973-74 TO 1976-77,
SIX TYPES OF INSTITUTIONS COMBINED

	June 30			
	1974	1975	1976	1977
1. Total assets to total liabilities	5.0	5.4	5.5	5.8
2. Current assets to current liabilities	1.3	1.3	1.5	1.5
3. Liquid assets to current liabilities	0.7	0.6	1.4	1.8
4. Net operating revenue to total revenue	1.9	1.9	3.3	2.4
5. Net E&G revenue to total E&G revenue	0.5	0.6	2.6	2.3

TABLE 43

SELECTED FINANCIAL RATIOS, MEDIAN INSTITUTIONS, END OF FISCAL YEARS 1973-74 TO 1976-77, RESEARCH UNIVERSITIES

		June 30			
		1974	1975	1976	1977
1.	Total assets to total liabilities	10.6	10.5	9.1	9.0
2.	Current assets to current liabilities	2.8	2.3	2.2	2.1
3.	Liquid assets to current liabilities	1.6	1.5	5.9	4.0
4.	Net operating revenue to total revenue	0.8	0.4	1.0	0.5
5.	Net E&G revenue to total E&G revenue	1.3	1.5	1.7	1.1

TABLE 44

SELECTED FINANCIAL RATIOS, MEDIAN INSTITUTIONS, END OF FISCAL YEARS 1973-74 TO 1976-77, DOCTORAL-GRANTING UNIVERSITIES

		June 30			
		1974	1975	1976	1977
1.	Total assets to total liabilities	4.5	4.5	4.8	4.8
2.	Current assets to current liabilities	1.6	1.6	1.4	1.4
3.	Liquid assets to current liabilities	0.9	0.8	3.3	2.8
4.	Net operating revenue to total revenue	3.1	2.5	0.9	1.0
5.	Net E&G revenue to total E&G revenue	2.0	2.7	1.9	1.2

TABLE 45

SELECTED FINANCIAL RATIOS, MEDIAN INSTITUTIONS, END OF FISCAL YEARS 1973-74 TO 1976-77, COMPREHENSIVE UNIVERSITIES AND COLLEGES

		June 30			
		1974	1975	1976	1977
1.	Total assets to total liabilities	3.9	4.2	4.5	4.6
2.	Current assets to current liabilities	1.6	1.4	1.4	1.3
3.	Liquid assets to current liabilities	0.5	0.5	2.4	2.8
4.	Net operating revenue to total revenue	3.8	2.8	2.3	2.5
5.	Net E&G revenue to total E&G revenue	5.2	3.9	3.3	3.1

TABLE 46

SELECTED FINANCIAL RATIOS, MEDIAN INSTITUTIONS,
END OF FISCAL YEARS 1973-74 TO 1976-77,
LIBERAL ARTS COLLEGES I

	June 30			
	1974	1975	1976	1977
1. Total assets to total liabilities	7.6	8.4	8.9	9.0
2. Current assets to current liabilities	2.1	2.5	2.6	2.7
3. Liquid assets to current liabilities	0.8	1.0	4.0	4.6
4. Net operating revenue to total revenue	2.6	1.4	1.5	1.8
5. Net E&G revenue to total E&G revenue	4.0	2.3	3.1	2.9

TABLE 47

SELECTED FINANCIAL RATIOS, MEDIAN INSTITUTIONS,
END OF FISCAL YEARS 1973-74 TO 1976-77,
LIBERAL ARTS COLLEGES II

	June 30			
	1974	1975	1976	1977
1. Total assets to total liabilities	3.7	3.7	3.8	3.8
2. Current assets to current liabilities	1.0	1.0	1.1	1.0
3. Liquid assets to current liabilities	0.4	0.4	1.1	1.0
4. Net operating revenue to total revenue	0.7	1.8	3.3	2.3
5. Net E&G revenue to total E&G revenue	-1.2	-0.8	1.3	1.7

TABLE 48

SELECTED FINANCIAL RATIOS, MEDIAN INSTITUTIONS,
END OF FISCAL YEARS 1973-74 TO 1976-77,
TWO-YEAR COLLEGES

	June 30			
	1974	1975	1976	1977
1. Total assets to total liabilities	6.3	7.4	7.6	8.6
2. Current assets to current liabilities	1.0	0.8	1.6	1.8
3. Liquid assets to current liabilities	0.7	0.6	1.4	1.8
4. Net operating revenue to total revenue	3.1	1.9	5.5	3.5
5. Net E&G revenue to total E&G revenue	-0.6	0.4	4.9	2.9

Selected Financial Ratios: 1976-77

The data of tables 42 to 48 permit comparisons among the six types of institutions with respect to several ratios. The data may be summarized as follows:

	Research Universities	Doctoral-Granting Universities	Comprehensive Universities and Colleges	Liberal Arts Colleges I	Liberal Arts Colleges II	Two-Year Colleges	Six Types of Institutions Combined
1. Total assets to total liabilities	9.0	4.8	4.6	9.0	3.8	8.6	5.8
2. Current assets to current liabilities	2.1	1.4	1.3	2.7	1.0	1.8	1.5
3. Liquid assets to current liabilities	4.0	2.8	2.8	4.6	1.0	1.8	1.8
4. Net operating revenue to total revenue	0.5	1.0	2.5	1.8	2.3	3.5	2.4
5. Net E&G revenue to total E&G revenue	1.1	1.2	3.1	2.9	1.7	2.9	2.3

In every case, higher ratios are more favorable, that is, indicate more financial strength, than lower ratios. Immediately, one observes the relative strength in total assets, current assets, and liquid assets of the Research Universities, Liberal Arts Colleges I, and, surprisingly, the Two-Year Colleges. Also one observes the relative weakness in the asset position of the Liberal Arts Colleges II. The revenue picture is quite different. Here the Research and Doctoral-Granting Universities appear to be the weakest with the Comprehensive Universities and Colleges and the Liberal Arts Colleges II among the stronger institutions.

Conclusions

The study of financial ratios has yielded the following conclusions:

1. The strength and the survival value of colleges and universities depend largely on intangible assets such as the ability to attract students, the latent capacity to raise money, the commitment and qualifications of the leadership, and many others. These intangibles are reflected imperfectly in accounting records. Therefore, caution is advised in drawing definite conclusions from financial data. Nevertheless, financial records are a necessary part of the analysis of institutional strength or weakness.

2. As revealed in the five ratios we have presented, the independent sector as a whole has been gaining ground over the past several years, though the ratios of net to total revenues slipped a bit in 1976-77.

3. The ratios for the various types of institutions have moved differently over the past three years. The ratio of total assets to total liabilities gained for all groups except the Research Universities. The trend of the ratios of current assets to current liabilities was upward for all groups, although in the single year 1976-77 these ratios for the Research and Doctoral-Granting Universities declined. The trend of the operating ratios was erratic. This uneven behavior is to be expected because net revenue is a small residual which is sensitive to small percentage changes in both revenues and expenditures. During the past year, this ratio remained positive for all six institutional groups.

4. Delicate financial stability has been the conclusion on the condition of the independent college sector in our previous reports. For most institutions that assessment remains valid. However, for the institutions controlling exceptionally large amounts of resources, the Research and Doctoral-Granting Universities, the financial ratios show a perceptible and consistent pattern of decline apparently related to reduction in federal funding for university-based research.

CHAPTER IX

ANALYSIS OF THE CONDITION OF INSTITUTIONS INDIVIDUALLY

The previous sections of this report described the condition of the independent sector as a whole or of sub-groups within the independent sector. The information presented was in the form of consolidated totals or medians describing trends in the position of groups of institutions. These data did not reveal the considerable variability among institutions. In this chapter, we report on our assessment of the data for 125 of the 135 sample institutions individually.

Institutional Variability

Figures 1 through 4 illustrate the degree of variability among inscitutions in the independent sector. In Figure 1, for example, we see the wide range of dependency on tuition and fee revenue. We also see that the median percent has moved upward a little over three years and that the range covering the middle 60 percent of the institutions has been reduced on the lower end suggesting a slight shift to tuition dependency from other sources of revenue.

Also in Figure 1 we note that it is the institutions with high dependence on federal revenues, the Research Universities, that are bearing the burden of revenue reduction from that source. The dependence on gift revenue does not appear to be changing but the substantial variation is clear.

Figure 2 illustrates the range of expenditure patterns for three different programs: instruction, research, and scholarships and fellowships. Figure 3 shows the range of percentage change in revenues and expenditures among indepdent institutions. Federal support and gifts are among the most volitile sources of revenues. Expenditures for research and scholarships also show considerable variation.

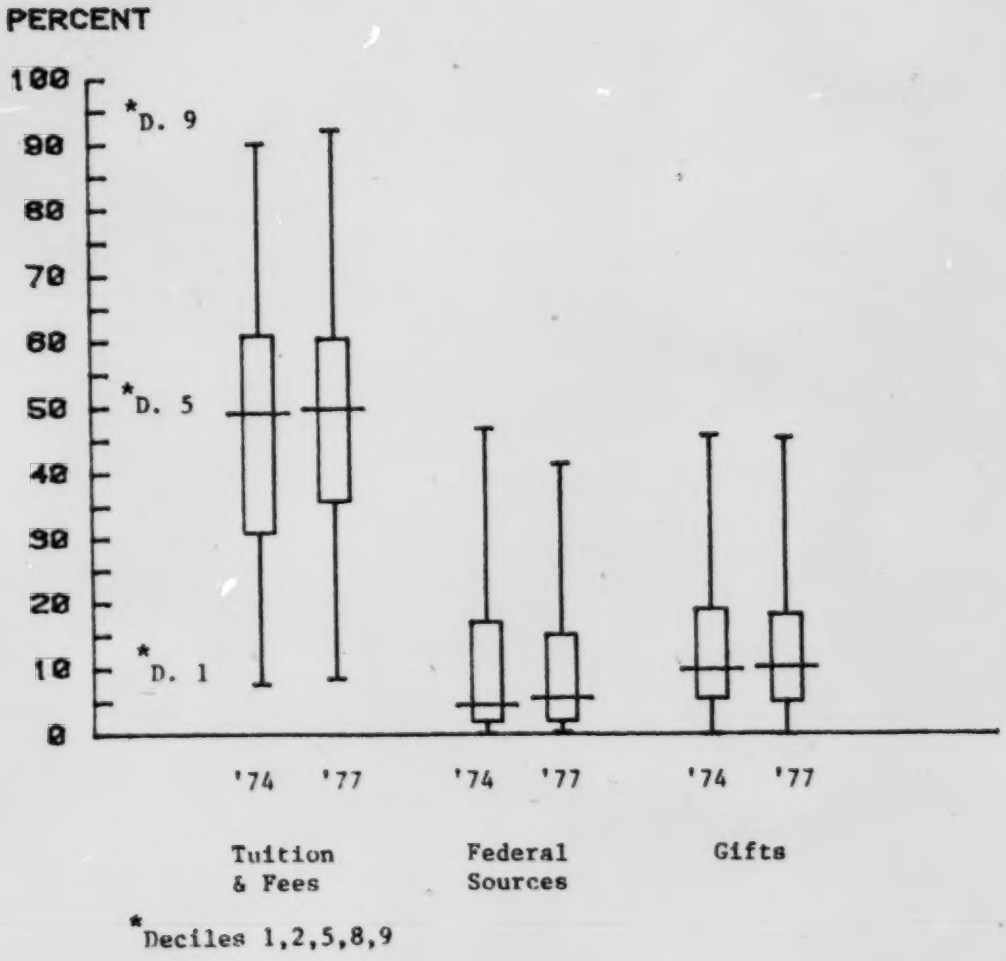
The variations in change of assets, liabilities and fund balances are relatively subdued as seen in Figure 4. The generally rapid growth in Loan Assets can easily be seen. But it is also clear that institutions are growing financially at quite different rates.

Methods of Assessing Financial Position and Progress

First, we assembled critical information for each institution indicating its relative "strength" as of 1976-77. For this purpose we used the following data:

FIGURE 1

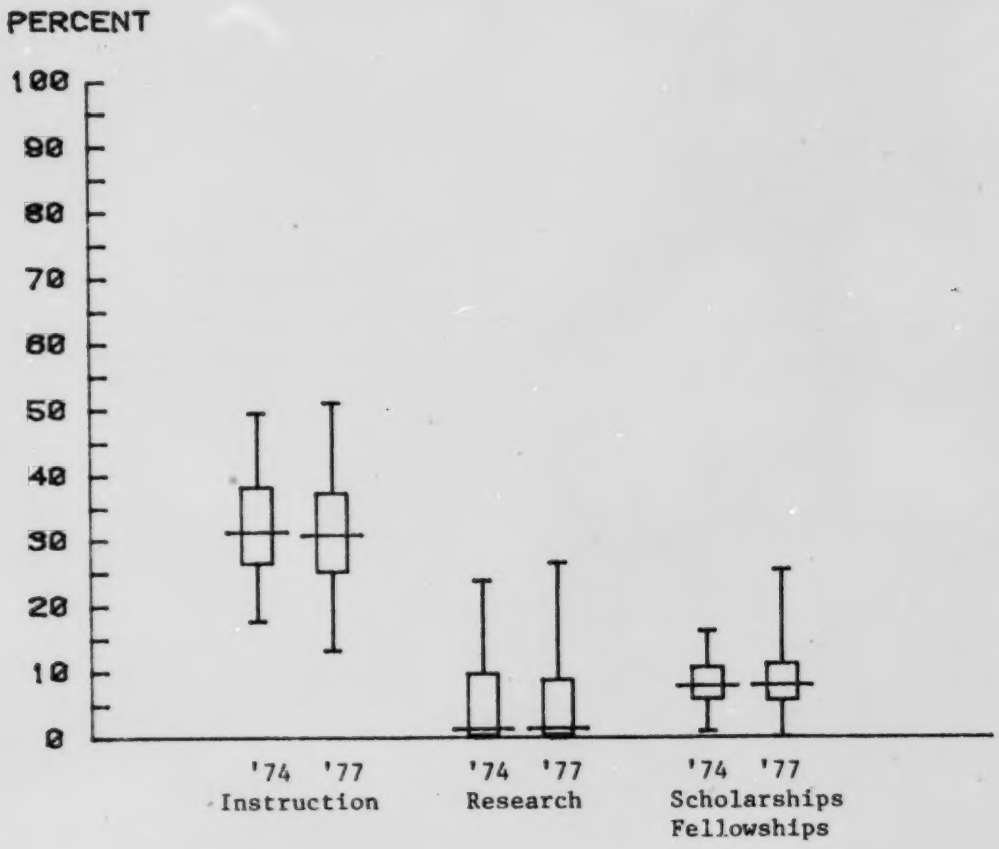
DISTRIBUTION* OF SELECTED REVENUES
AS PERCENT OF TOTAL REVENUES
125 Independent Universities and Colleges



*Deciles 1,2,5,8,9

FIGURE 2

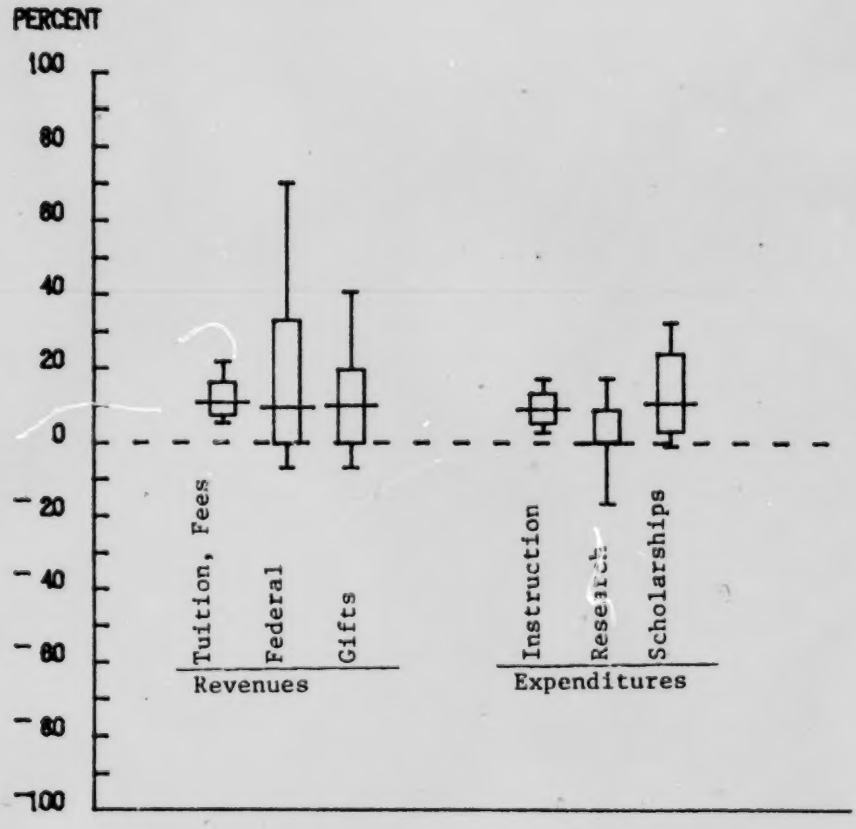
DISTRIBUTION* OF SELECTED EXPENDITURES
AS PERCENT OF TOTAL EXPENDITURES
125 Universities and Colleges



*Deciles 1,2,5,8,9

FIGURE 3

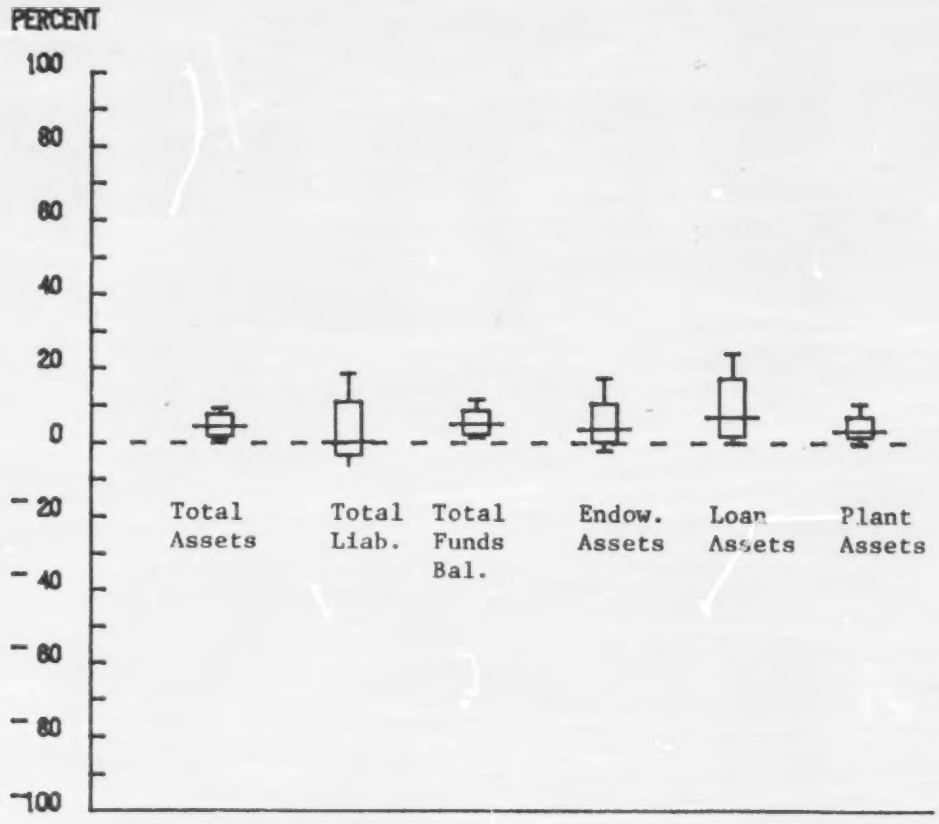
DISTRIBUTION* OF 3-YEAR AVERAGE PERCENT CHANGE
IN REVENUES, EXPENDITURES
125 Universities and Colleges



*Deciles 1,2,5,8,9

FIGURE 4

DISTRIBUTION* OF 3-YEAR AVERAGE PERCENT CHANGE
IN ASSETS, LIABILITIES, FUND BALANCES
125 Independent Universities and Colleges



*Deciles 1,2,5,8,9. The wide band represents 60% of the cases. The total band represents 80% of the cases.

Item	Characteristic Measured
Endowment fund balance per FTE student	Financial independence
Ratio of total assets to total liabilities	Debt burden
Ratio of current assets to current liabilities	Liquidity
Total current revenue per FTE student	Adequacy of revenues
Total assets (less interfund borrowing) per FTE student	Adequacy of assets

Those institutions were classified as "strong" which in our judgment had resources per student sufficient to mount high-quality programs and were not burdened with exceptional indebtedness. At the other extreme, those institutions were classified as "weak" which had minimal resources per student and relatively heavy indebtedness. Between the extremes were those institutions which were neither exceptionally strong nor exceptionally weak.[1]

Second, we assembled data for each institution on changes over the past six years and over the past four years in critical factors affecting financial and educational strength. For the purpose we used the following data:

Item	Characteristic Measured
Percentage change in endowment fund balance	Financial independence
Percentage change in total revenues	Adequacy of revenues
Percentage change in FTE enrollment	Capacity to attract and hold students
Point change[2] in ratio of total assets to total liabilities	Debt burden
Point change[2] in ratio of current assets to current liabilities	Liquidity
Point change[2] in ratio between overall surplus or deficit and net revenue	Surplus or deficit

Using the data on change (over the four years and over the past two years) we divided the institutions into three categories; those gaining ground, those holding their own, and those losing ground.[3]

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[1] For the methodology, see Appendix C.

[2] Number of points by which ratio changed.

[3] For the methodology see Appendix C.

With these procedures, we were able to place each institution in a matrix expressing both its current position and the direction in which it is heading. As would be expected, we found some currently strong institutions which appeared to be losing ground and some currently weak institutions which seemed to be gaining ground. And, as would be expected, we found considerable variability among the institutions.

Findings

The resulting classifications of institutions for 1976-77 are presented in table 49. From this table the following conclusions may be reached:

1. The distribution of institutions, according to their present condition and recent trends in that condition changed over the last year. The one notable change was an increase from 20 to 34 in the percent of institutions classified as "losing ground." This change may reflect bias that is inherent in our methodology. Nevertheless, in our opinion, there was a perceptible adverse change in the general situation in 1976-77. In last year's report, we had noted "a barely perceptible adverse change" for 1975-76. For 1976-77 we believe the adverse trend may have intensified.

2. In 1975-76 the proportions of strong, middle, and weak institutions "losing ground" in 1975-76 were equal. In 1976-77, there appeared to be a higher proportion of weak and middle strength institutions "losing ground." The percent of strong institutions "losing ground" remained the same.

3. Institutions do move in and out of the "losing ground" category. Losing ground financially in one year does not signify continued decline nor probable extinction. Based on our sample of 125 institutions we estimate that only about 7 to 10 percent of the sector are chronic cases in the sense that they lost financial ground in two consecutive years.

4. In the same year when an increasing percentage of institutions were losing ground, a larger percentage were gaining ground--21 percent in 1975-76 and 25 percent in 1976-77.

TABLE 49

PERCENTAGE OF INSTITUTIONS, BY ESTIMATED CURRENT CONDITION AND ESTIMATED RECENT TREND IN CONDITION, 1975-76 AND 1976-77

Type of Institution and Current Condition	Estimated Recent Trend in Condition[1]							
	Gaining Ground		Holding Steady		Losing Ground		Total[2]	
	1975 -76	1976 -77	1975 -76	1976 -77	1975 -76	1976 -77	1975 -76	1976 -77
Research Universities:								
Strong	--	10	70	60	20	20	90	90
Middle	--	--	10	--	--	10	10	10
Weak	--	--	--	--	--	--	--	--
Total	--	10	80	60	20	30	100	100
Doctoral-Granting Universities:								
Strong	--	10	40	50	40	20	80	80
Middle	--	--	20	20	--	--	20	20
Weak	--	--	--	--	--	--	--	--
Total	--	10	60	70	40	20	100	100
Comprehensive Universities and Colleges:								
Strong	--	3	9	6	9	9	18	19
Middle	--	6	48	31	18	22	66	59
Weak	--	9	16	6	--	6	16	22
Total	--	19	73	43	27	38	100	100
Liberal Arts Colleges I:								
Strong	--	17	26	22	22	13	48	52
Middle	9	4	26	22	9	13	44	39
Weak	--	4	4	--	4	4	8	9
Total	9	26	56	44	35	30	100	100
Liberal Arts Colleges II:								
Strong	--	3	9	3	--	3	9	9
Middle	3	6	13	6	6	3	22	15
Weak	16	16	44	34	9	25	69	75
Total	19	25	66	44	15	31	100	100
Two-Year Colleges:								
Strong	17	17	6	--	--	--	22	17
Middle	6	--	22	11	6	22	33	33
Weak	28	17	6	11	11	22	44	50
Total	50	33	33	22	17	44	100	100
Six Types Combined (Weighted)								
Strong	3	8	13	8	6	5	22	22
Middle	4	4	21	12	7	11	32	28
Weak	14	13	25	19	7	18	46	50
Total	21	25	59	40	20	34	100	100

[1] Includes three- and one-year trends.

[2] Detail may not add to total because of rounding.

CHAPTER X

FURTHER OBSERVATIONS ON RETRENCHMENT AND QUALITY

One of the fundamental assumptions underlying our studies of independent higher education is that retrenchment in program and activities and deterioration of basic quality or performance are critical symptoms of financial decline or distress. Both retrenchment and quality deterioration are more telling indicators than financial data. And of the two, quality deterioration is the more significant. Indeed, if, in spite of financial reverses leading to retrenchment, institutions can succeed in maintaining or advancing the level of their qualitative performance, that should be regarded as an improvement in efficiency and a managerial triumph and not necessarily a sign of weakness. Every decline in the rate of growth of revenues is not necessarily a disaster.

It is, of course, difficult to gather plausible data on the qualitative performance of institutions. Nevertheless, each year during the course of our studies, we have tried to assemble information that bears on retrenchment with respect to staff, facilities, or program or that gives some indication of changes in qualitative performance. This year is no exception. Most of the information of this type we collected for 1977-78 is to be found in chapter IV.

In addition to what is presented in chapter IV, we made a special study of a small group of about ten institutions which we judged to have performed poorly according to our criteria and another comparable group which we thought had performed well. The institutions involved were all smaller institutions. Our hypothesis was that we would find a great deal of retrenchment and slippage of quality among the low-performers as compated with the high performers. Note: we were comparing trends or changes over time, not absolute levels of performance.

Our data came from two sources. One source was a special tabulation of questionnaires[1] concerning changes in (a) qualifications, attitudes, performance, and working conditions of faculty; (b) academic preparation, attitudes, achievements, and activities of students; (c) methods of instruction; and (d) availability and quality of student services. The respondents were chief academic officers, chief student personnel officers, and senior faculty members. The second source was a series of telephone interviews with the deans and chief business officers of the institutions. From these interviews we hoped to get a somewhat generalized and open-ended impression of conditions at each institution.

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[1] These were the same questionnaires which provided most of the data for chapter IV.

Gleanings from the Tabular Information

The tabulations based on the questionnaires are too voluminous to present here in detail. In general, they show that progress is by no means confined to the high-performance institutions, and that the difference between the two groups in the proportion of institutions reporting progress is much less than we had supposed. Remarkably, the low-performance institutions surpassed the high-performance institutions in the proportion indicating that they have been making progress in faculty quality and performance, in student attitudes and performance, and in innovative methods of instruction. On the other hand, the high-performance institutions were ahead in the proportion reporting progress in the development of student services and in the academic preparation of students. Our main finding was that the differences between the two groups of institutions in rate of progress was by no means as striking as might be assumed, and that the low-performance institutions should not be given up as hopeless cases.

Overall, this exploration--like all our previous efforts--did not produce clear-cut conclusions as to the prevalence of retrenchment and deterioration of quality--even among the apparently least successful institutions. Indeed, one could argue on the basis of the responses that the low-performance institutions are progressing as rapidly as their high-performance counterparts because they are trying harder.

Supplemental to the data reflecting opinions of institutional officials is a special tabulation for the two groups of institutions on enrollment trends and on certain financial variables (see table 50). These data reveal unmistakable differences between the two groups. The high performers showed marked progress, tapering off in recent years, in applications to the freshman class; whereas the low performers experienced a steep decline to 1974-75 but a substantial recovery thereafter. The trend of freshman aptitude test scores was, surprisingly, about the same for the two groups. The trend of total enrollment was similar for the two groups until 1973-74, but continued upward for the high-performers and leveled off for the low-performers. The student-faculty ratio increased erratically for the high-performers but fell off sharply for the low-performers, probably indicating a substantial rise in faculty-related costs per student. Both groups experienced an upward trend in revenues and expenditures, but in the case of the high-performers, the growth of revenues exceeded the growth of expenditures, whereas in the case of the low-performers, expenditures outstripped revenues.

The enrollment and financial statistics, combined with the opinion data, suggest two possible conclusions. First, the most important difference between high-performers and low-performers may lie largely in the ability to attract students, and through them to draw revenues from tuitions. Second, that the differences in revenue growth have not yet resulted in dramatic differences in rate of retrenchment or in educational progress. These conclusions are admittedly conjectured.

TABLE 50

SELECTED DATA ON ENROLLMENT AND FINANCES,
HIGH-PERFORMING AND LOW-PERFORMING INSTITUTIONS,
1969-70 TO 1976-77
(Index Numbers: 1969-70 or 1973-74 = 100)

	1969 -70	1972 -73	1973 -74	1974 -75	1975 -76	1976 -77	1977 -78
Number of completed applications received for admission to freshman class:							
High performers	100	102	107	118	125	126	126
Low performers	100	93	85	82	73	76	84
Average combined Scholastic-Aptitude Test (SAT) scores of entering freshmen:							
High performers	100	98	97	95	97	95	92
Low performers	100	96	95	94	92	92	92
Total opening fall enrollment, FTE:[1]							
High performers	100	106	109	111	117	116	119
Low performers	100	112	109	111	111	110	108
Ratio: students to faculty, FTE:[1]							
High performers	---	---	100	103	105	101	108
Low performers	---	---	100	110	97	96	90
Total revenues:							
High performers	---	---	100	109	131	144	---
Low performers	---	---	100	110	115	127	---
Total expenditures:							
High performers	---	---	100	110	126	136	---
Low performers	---	---	100	111	119	132	---
Endowment fund balances:							
High performers	---	---	100	104	110	120	---
Low performers	---	---	100	101	103	108	---
Federal revenues:							
High performers	---	---	100	112	141	157	---
Low performers	---	---	100	115	134	150	---

[1] Full-time equivalent.

Gleanings from the Telephone Interviews

This section, which was prepared by our colleague, Lynn Parsons, provides summary information in four parts:

Responses for low-performing institutions:
- from academic deans
- from chief business officers

Responses for high-performing institutions:
- from academic deans
- from chief business officers

Low Performers, Academic Deans. The majority of academic deans rated their overall academic programs as improved over those of last year. The major factors contributing to this improvement were changes related to faculty, curriculum, and students.

In over three-fourths of the low performers, no new faculty members were added to existing programs. Vacancies created by retirement of tenured persons were not filled. Faculty members hired previously for specialized teaching were given broader basic course responsibilities or released. The gaps created by these cuts were filled to the extent necessary by existing faculty or part-time faculty.

Criteria and procedures for evaluating and promoting current faculty and hiring new faculty underwent stringent changes. Tenure was no longer awarded for years of service but based instead on quality of professional performance in the areas of teaching, research, and publishing. Many of these changes were faculty-initiated, resulting from scrutiny of their own ranks and success of their academic program in attracting students. Faculty members who were uncommitted or marginal in attitude toward the success of the institution were weeded out. The result in many colleges was a stronger and more united faculty.

The major change in curriculum was the elimination of course offerings with small enrollments or those unnecessary for degree requirements. In some colleges courses were combined to produce a better program. In over half of the institutions there was an expansion of cooperative efforts with other nearby colleges to share facilities and staff, to strengthen curricula, and to utilize existing faculty and facilities more efficiently.

Students entering low-performing group of colleges were rated by the majority of academic deans at approximately the same academic level as last year's entering class. There were slight increases in SATs but nothing significant. The deans reported enforcement of more stringent requirements for admissions to this year's program and for the following years. In some institutions it was necessary to broaden existing basic programs to ensure a smooth transition to more intensified course requirements.

The deans reported little or no change in the academic qualifications of entering students but they also reported admitting more students on probationary basis to bolster declining enrollments, and the expenditure of more time, effort, and money to create remedial programs to bring probationary students up to college-level academic performance.

Only two colleges in this group reported new or expanded programs in student services, both in the areas of financial aid.

Only half of the deans reported retrenchment at their institutions in the last two years. The results from this process required cutting back on number of faculty positions, eliminating unnecessary courses, and in several instances freezing faculty salaries.

Not one of the deans viewed retrenchment as producing a decline in quality of academic program. In fact, they viewed it as improvement since it resulted primarily in close scrutiny of structure and the elimination of weak programs or staff. These same institutions also reported changes in top administrators within the last year. They looked to these new administrators as the potential for relief from their present condition. Many of the institutions had started recently or were about to begin self-studies to evaluate their programs over a period of several years.

Those institutions reporting no retrenchment attributed their stability to planning based on self-evaluation.

Low Performers, Chief Business Officers. The chief business officers when asked to rate the overall financial performance of their colleges, agreed with the academic deans that there had been either no change or improvement.

Factors contributing to this rating included stabilized or slightly increased enrollments which allowed them to balance budgets, smaller deficits, increases in gifts and grants, and changes in top administration resulting in better management.

Increased revenues came from tuition, fees, and grants. Two institutions' concerted fund drives were successful in providing needed revenue.

Expenditure levels apart from inflation were up, due primarily to increased utilities and personnel costs.

Changes in budgeting procedures included more active budget committees and tightening operating expenses. The decision-making process on budget items was treated as an on-going process rather than assigned to a single meeting. In some colleges, the responsibilities and/or staff size of the business office were expanded.

Three fourths of the business officers reported retrenchment at their institution in the last two years. This proportion is slightly higher than that reported by the academic deans.

In addition to reduction in faculty and staff mentioned earlier, the primary examples of retrenchment listed included delaying routine repair of buildings, cutting security, a more conservative attitude towards incurring debt, and cutting the use of some facilities to reduce utility costs.

Like the academic deans, those business officers reporting no retrenchment attributed their stability to good planning and management.

The business officers differed slightly from the academic deans in their view of the overall impact of retrenchment on the college. The majority saw retrenchment as positive or at least causing no significant change. They saw retrenchment resulting in closer scrutiny of programs and better personnel utilization, and thus better use of available funds. However, several business officers reported a decline in quality due to retrenchment. The reduction in faculty positions and courses were significant enough at these institutions to have a negative impact on performance. These business officers were deeply concerned about retrenchment, coupled with declining enrollments as a source of revenue, and felt that their institutions could not maintain a "ragged edge" existence much longer.

High Performers, Academic Deans. Over half of the academic deans reported an increase in the overall quality of their academic programs this past year. The others saw no significant changes, only continued stability. Cited as significant factors in this good record were high standards for faculty, sound curricula, expanded services to students, and strong planning.

Slightly more than half of the colleges in this group recruited new full-time faculty members. Most vacancies created by retirement and resignation were filled. Standards for recruitment at these institutions were said to be stringent. They allowed themselves ample lead time to review candidates and expanded their recruitment from eminent institutions outside of their own geographic area. Academic performance of existing faculty was reviewed carefully each year with emphasis on continued improvement.

Curriculum changes involved the addition of courses rather than dropping courses. The introduction of more career-oriented programs was the dominant response to the demand of students for marketable skills. Academic demands were reflected in upgrading existing courses in most institutions. Only two colleges reported creating pilot remedial programs for entering students. The other colleges did not have nor plan to create such programs.

New services to students were reported by three-fourths of these institutions. Career counseling was reported most frequently. In some cases spcial conferences on careers were conducted, especially for women. Existing student services were expanded.

The development and implementation of strong planning programs was listed as an important factor in maintaining high academic quality. All of the institutions were involved in three to ten-year self-study

programs. This type of on-going evaluation was viewed as a positive measure to protect against crisis situations. Not one of the institutions in this group reported retrenchment.

High Performers, Chief Business Officers. Business officers in the high performing institutions agreed with the academic deans in reporting either an increase or no significant change in financial performance.

Revenues were up slightly, and there were no significant changes in expenditures, except for increases in utility costs. The majority of these institutions had strong budget planning committees. They attribute their stability or growth to good management and strong development plans.

Only one of the business officers mentioned retrenchment. This was due primarily to declining enrollments which would affect them principally in the area of faculty salaries. This was not viewed as negatively affecting overall program quality, however.

Summary. The results of the telephone interviews are summarized in table 51. Significant differences between the two groups are evident; yet few of the low performers, as they are viewed by their deans and business officers, are on the brink of disaster, though doubtless a serious deterioriation of the environments in which they operate could bring grave trouble.

Conclusions

The tabular data derived from the questionnaires and the telephone interviews were not calculated to produce conclusive evidence about the condition of the institutions but rather to provide some impressions of the general situation. As in past years the situation cannot be described in contrasting tones of black and white. The differences among even the strongest and the weakest institutions are fuzzy differences of degree. None of the institutions in our sample is resigned to defeat. All are struggling, and under adversity the struggle becomes more intense.

TABLE 51

SUMMARY OF REPORTED CHARACTERISTICS: High- vs LOW-PERFORMING INSTITUTIONS

Characteristic	High Performing	Low Performing
Academic Deans		
Faculty:		
Recruiting new full-time faculty	++	0
Improving criteria for faculty evaluation	++	+
Reducing number of faculty positions	0	++
Enrollments:		
Increasing	++	+
Steady	+	++
Decreasing	0	+
Raising admission standards	++	+
Accepting probationary students	0	++
Curriculum:		
Expanded course offerings	++	+
Creating new career-oriented programs	++	+
Creating basic remedial programs	0	++
Administrative:		
Expanded student services	++	+
Changes in key leadership	+	++
Long-range planning programs	++	+
Retrenchment	0	++
Business Officers		
Increased revenues	++	+
Decreased deficits	++	+
Restricted operating expenses	0	++
Deferred maintenance	0	++
Active budget committee	++	+
Good management	++	+
Long-range development programs	++	+
Retrenchment	0	++

LEGEND: ++ = majority report this characteristic.
+ = minority report this characteristic.
0 = few or none reporting this characteristic.

CHAPTER XI

SUMMARY AND CONCLUDING OBSERVATIONS

This report is the fourth in an annual series designed to provide timely and reliable information on the condition of the independent sector of American higher education. The report is based on comprehensive information gathered from a carefully chosen sample of 135 independent colleges and universities. This year the sample was extended to include two groups of institutions that had previously been omitted, namely Research Universities and Two-Year Colleges. The sample is representative of all independent, non-profit, accredited institutions except professional schools such as theological seminaries and music conservatories.

The series of reports provides data covering the period beginning in the year 1969-70 and extending to 1976-77 for financial data and to 1977-78 for most other data. However, because of a change in the classification of accounts, fully comparable data on revenues and expenditures are available only for the years 1973-74 through 1976-77.

Each chapter of this report contains a concluding summary statement. Hence this final chapter concentrates on overall interpretation of the findings.

Findings for the Independent Sector as a Whole

Enrollment. The enrollment trend among independent institutions has been slowly but steadily upward. This trend was continued in 1977-78, and held for all six types of institutions. The mix of students has changed over time toward increasing proportions of graduate, professional, and part-time (mostly adult) students, and decreasing proportions of full-time undergraduate students. The absolute number of undergraduate students, however, has not declined. There have been no notable changes in the qualifications of new undergraduate students as measured by rank in high school and test scores. The test scores of students admitted to the independent sector have fallen about in proportion to the nation-wide decline in these scores. Increasing competitiveness in the recruitment of students is indicated by the steady decrease in the ratio of new students to admissions staff. Student attrition has changed little and may even have declined slightly.

Faculty and Other Staff. The number of faculty members has been keeping pace with enrollment or perhaps moving slightly ahead of enrollment. There has been no observable retrenchment in size of faculty. Faculty turnover has remained about constant year after year, and the percentage on tenure has increased very slowly. The 1977-78 increase in faculty compensation nearly kept pace with inflation but fell considerably short of

average increases in compensation for the general labor force. The number of administrative staff remained about constant in 1977-78 but the number of clerical and other workers declined by about 5 percent. Increases in compensation for administrative and general service workers also appeared on the whole to be less than for faculty. Non-academic employment and compensation appears to be one area of significant retrenchment.

Educational Program. As reported by the institutions, the qualifications, competence, and performance of faculties are improving. Though the potential ability of students as measured by test scores and rank in high school class is holding fairly steady, their secondary preparation is deteriorating and their interest in liberal learning (as contrasted to specific vocational preparation) is waning. These changes in students are, of course, reflective of nation-wide trends and do not imply that the independent sector of higher education is at fault. However, the decline of interest in liberal learning if sustained could have a serious impact upon them. Innovation in methods of instruction is widespread and the institutions report gains in general quality of instruction. Many institutions are expanding student services and few are contracting them. Most institutions report that in financial strength, academic excellence, and student services they are "holding their own" or "gaining ground." In general, the institutions report overwhelmingly that overall performance is not deteriorating, that little important retrenchment is taking place, and that the level of confidence and morale remains high.

Operating Revenues and Expenditures. Current revenues and expenditures approximately kept pace with the combined increases in the Consumer Price Index and in enrollment. This was a major accomplishment though it left little room for upgrading programs or adding new programs. The distribution of revenues among sources and of expenditures among purposes remained fairly constant. There was, however, a slowly increasing percentage of revenue from tuitions and a downward drift in the percentage from the federal government and from endowment income. These are unfavorable changes. On the whole, the current financial situation has changed little over recent years.

Student Financial Aid. A favorable factor in recent years has been the growth in amount of student aid funds from the federal government. This has enabled the institutions to reduce or stabilize their own expenditures for student aid.

Assets, Liabilities, and Net Worth. Changes in the balance sheet were small. The most significant change was a slow, steady improvement in various ratios of assets to liabilities indicating a reduction in debt relative to assets or an increase in net worth. The trend of current liabilities, however, has continued upward.

The Condition of Institutions Individually

The proportion of institutions that we judged to be "losing ground" increased from 20 percent in 1975-76 to 34 percent in 1976-77. This is a disturbing development. However, not a single institution in our sample of 135 ceased operations during the past four years, and not a single one indicated that it was in danger of expiring in the foreseeable future--

though seven said they were "losing ground" financially. As shown in table 49, we judge that about half of the institutions were currently in a "weak" financial position, that about one-third were "losing ground." However, some of the institutions that were losing ground were currently strong and some of the institutions that were currently weak were gaining ground. The more serious cases were those which were both currently weak and losing ground. These increased from 7 percent of the total in 1975-76 to 18 percent, or nearly a fifth, in 1976-77. These institutions were concentrated within the Liberal Arts Colleges II and the Two-Year Colleges, though there were a few among the Comprehensive Universities and Colleges and Liberal Arts Colleges I.

Whereas last year we concluded that "there may have been a barely perceptible downward drift" with respect to the distribution of institutions by financial strength or financial trends, we think the trend was stronger in 1976-77, though neither catastrophic nor irreversible. On the other hand, the proportion of institutions judged to be "strong" has not diminished, and the proportion "gaining ground" has increased. Thus, even though the independent sector taken as a whole has held fairly steady, we think the proportion of institutions in a precarious position increased in 1976-77. We do not think the change was sufficient to sound all alarms but the ratchet was tightened by a notch or two.

Findings by Types of Institutions

With the addition to our sample of Research Universities and Two-Year Colleges, the range of institutions under study has widened and the differences among the several groups have become greater. It may be worth while, therefore, to comment on the position of some groups.

The Research Universities showed up strongly on admissions and enrollments, instructional program, faculty, and the like, but the data on their current financial operations suggest that they were experiencing hard times. For example, they made sharp cuts in the employment of administrative and general service employees, their deflated revenue per student did not increase, their total revenues rose by slightly more than their total expenditures, their interfund borrowing increased sharply, and their net revenue ratios were low compared with those of other groups of institutions. These universities showed up as basically strong in the sense of having abundant assets, excellent reputations, powerful attraction for students, etc.,--but they also had correspondingly heavy obligations and their current financial trends were somewhat adverse. These adverse trends were also reflected in the relatively pessimistic view of the future expressed by the presidents. The problem may have been due in part to reductions in the relative amount of support from federal categorical grants.

The findings pertaining to the Liberal Arts Colleges I are also of interest. They showed continuing strength in enrollment and staff, but their trends were moderately downward for current fund revenue per student. The percentage of revenue from private gifts jumped up sharply in 1976-77 indicating increasing difficulty in balancing budgets from tuitions and endowment income. Their net revenue ratio declined moderately indicating a decreasing margin of revenues over expenditures. On the other hand,

their ratios of assets to liabilities all improved substantially. One detects among these colleges a slightly adverse financial trend though their overall position remained in most respects strong.

The basic position of the Liberal Arts Colleges II and the Two-Year Colleges was of course weaker than that of the Research Universities and the Liberal Arts Colleges I. However, the trends were not necessarily less favorable. Enrollment trends for Liberal Arts Colleges II were sluggishly upward but rapidly upward for the Two-Year group but student attrition was high for both, especially so for the Two-Year Colleges. Student-faculty ratios were high for both groups but declining and both groups were adding administrative and general service staff. Expectations as reported by the presidents were relatively optimistic. Total revenues and deflated revenues per student were growing more rapidly than the average of these magnitudes for all institutions. The distribution of revenues and expenditures was holding steady, though the Two-Year Colleges received an exceptionally large proportion of revenues from current gifts. The several ratios of assets to liabilities were very low for Liberal Arts Colleges II and high for the Two-Year Colleges, but both show up reasonably well on net revenue ratios.

The differences among types of institutions suggest that hard times are not confined to the smaller or less famous institutions and that progress and success are not confined to the larger or more selective institutions. Along with greater size, endowments, physical plant, and program go built-in obligations that lead to financial strain and insecurity just as acute as that experienced by other institutions.

Concluding Comment

The record of performance of independent higher education over recent years has been as good as it has been partly because of a slow and seemingly inexorable using-up of capital. Some of this consumption of capital has been in the form of drawing down reserves or of using for current operations gifts that should have gone into endowments. Some of the capital consumption has been in the form of deferred maintenance and replacement of plant and equipment for which no reserves have been accumulated. And part has been a consumption of human capital through inability to keep faculty and staff compensation growing in proportion to the wages and salaries of the national labor force. Currently academic compensation is slipping behind the general level of wages and salaries each year by perhaps 1.5 to 2.0 percentage points. If this slippage persists over many years, colleges and universities will be unable to replace faculty and staff with persons equal in competence to those now employed and the greatest asset of all, capable people, will have been depleted.[1]

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[1]For a detailed discussion of this subject, see Howard R. Bowen, Academic Compensation. New York: Teachers Insurance and Annuity Association and College Retirement Equities Fund, 1978.

APPENDIX A

STATISTICAL TABULATIONS

TABLE I

RECRUITMENT AND ADMISSION OF UNDERGRADUATE STUDENTS,
1973-74 THROUGH 1977-78,
RESEARCH AND DOCTORAL-GRANTING UNIVERSITIES
(Index Numbers: 1973-74 = 100)

	Autumn				
	1973-1974	1974-1975	1975-1976	1976-1977	1977-1978
1. Number of completed applications received for admission to freshmen class	100	105	110	114	120
2. Number of applicants offered admission to the freshmen class	100	103	108	111	115
3. Number of full-time equivalent new freshmen actually enrolled	100	101	106	106	107
4. Number of full-time equivalent new undergraduate transfer students actually enrolled	100	97	109	104	107
5. Number of full-time equivalent new undergraduate students, freshman and transfer, actually enrolled	100	101	102	100	101
6. Offers of admission to the freshmen class as percentage of completed applications received	62%	61%	61%	60%	59%
7. Entering freshmen as percentage of admissions offered	50%	50%	49%	48%	47%

TABLE II

RECRUITMENT AND ADMISSION OF UNDERGRADUATE STUDENTS,
1973-74 THROUGH 1977-78,
COMPREHENSIVE UNIVERSITIES AND COLLEGES,
(Index Numbers: 1973-74 = 100)

	Autumn				
	1973-1974	1974-1975	1975-1976	1976-1977	1977-1978
1. Number of completed applications received for admission to freshmen class	100	97	97	102	107
2. Number of applicants offered admission to the freshmen class	100	98	95	99	104
3. Number of full-time equivalent new freshmen actually enrolled	100	100	100	100	104
4. Number of full-time equivalent new undergraduate transfer student actually enrolled	100	99	94	101	101
5. Number of full-time equivalent new undergraduate students, freshman and transfer, actually enrolled	100	100	99	99	100
6. Offers of admission to the freshmen class as percentage of completed applications received	84%	84%	82%	82%	80%
7. Entering freshmen as percentage of admissions offered	56%	56%	57%	56%	58%

TABLE III

RECRUITMENT AND ADMISSION OF UNDERGRADUATE STUDENTS,
1973-74 THROUGH 1977-78,
LIBERAL ARTS COLLEGES I
(Index Numbers: 1973-74 = 100)

	Autumn				
	1973-1974	1974-1975	1975-1976	1976-1977	1977-1978
1. Number of completed applications received for admission to freshmen class	100	100	97	100	99
2. Number of applicants offered admission to the freshmen class	100	102	103	105	107
3. Number of full-time equivalent new freshmen actually enrolled	100	100	99	104	104
4. Number of full-time equivalent new undergraduate transfer students actually enrolled	100	104	113	108	104
5. Number of full-time equivalent new undergraduate students, freshman and transfer, actually enrolled	100	101	101	105	105
6. Offers of admission to the freshmen class as percentage of completed applications received	71%	72%	76%	75%	74%
7. Entering freshmen as percentage of admissions offered	51%	49%	48%	50%	49%

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TABLE IV

RECRUITMENT AND ADMISSION OF UNDERGRADUATE STUDENTS,
1973-74 THROUGH 1977-78,
LIBERAL ARTS COLLEGES II
(Index Numbers: 1973-74 = 100)

	Autumn				
	1973-1974	1974-1975	1975-1976	1976-1977	1977-1978
1. Number of completed applications received for admission to freshmen class	100	100	103	105	109
2. Number of applicants offered admission to the freshmen class	100	101	102	101	102
3. Number of full-time equivalent new freshmen actually enrolled	100	99	100	101	102
4. Number of full-time equivalent new undergraduate transfer students actually enrolled	100	95	107	110	118
5. Number of full-time equivalent new undergraduate students, freshman and transfer, actually enrolled	100	98	102	105	108
6. Offers of admission to the freshmen class as percentage of completed applications received	91%	91%	89%	86%	85%
7. Entering freshmen as percentage of admissions offered	60%	61%	59%	60%	60%

TABLE V

RECRUITMENT AND ADMISSION OF UNDERGRADUATE STUDENTS,
1973-74 THROUGH 1977-78,
TWO-YEAR COLLEGES
(Index Numbers: 1973-74 = 100)

	Autumn				
	1973-1974	1974-1975	1975-1976	1976-1977	1977-1978
1. Number of completed applications received for admission to freshmen class	100	108	107	106	118
2. Number of applicants offered admission to the freshmen class	100	105	109	109	114
3. Number of full-time equivalent new freshmen actually enrolled	100	101	121	122	132
4. Number of full-time equivalent new undergraduate transfer students actually enrolled	100	92	94	113	112
5. Number of full-time equivalent new undergraduate students, freshman and transfer, actually enrolled	100	92	121	108	114
6. Offers of admission to the freshmen class as percentage of completed applications received	102%	101%	101%	103%	105%
7. Entering freshmen as percentage of admissions offered	85%	83%	90%	88%	83%

TABLE VI

COMPARATIVE MEDIAN SALARIES OF SELECTED ADMINISTRATORS, PUBLIC AND INDEPENDENT INSTITUTIONS, 1977-78
(in thousands)

Type of Institution and Enrollment	Chief Executive Officer	Chief Academic Officer	Registrar	Head Librarian	Chief Business Officer	Chief Student Life Officer
Universities						
Public:						
Under 10,000	$ 40.4	$ 39.9	$ 22.9	$ 28.5	$ 33.3	
10,000 to 19,900	48.3	40.9	21.5	30.1	38.0	
20,000 to 29,999	50.0	42.7	25.0	35.4	40.4	
30,000 and over	57.3	46.0	25.7	37.8	47.5	
Private:						
Under 5,000	45.3	39.2	21.3	23.5	39.7	
5,000 to 9,999	55.0	42.0	20.4	25.6	40.0	
10,000 and over	59.1	46.0	24.5	30.5	43.7	
Colleges						
Public Four-Year:						
Under 2,500	33.0	28.0	17.6	18.3	23.2	$ 21.6
2,400 to 4,999	39.0	31.0	19.7	20.5	27.1	25.0
5,000 to 9,999	40.0	33.8	21.9	24.2	29.7	28.2
10,000 and over	42.5	36.6	23.0	27.8	32.9	30.2
Independent Four-Year:						
Under 500	25.0	19.0	11.0	12.3	16.3	14.1
500 to 999	29.5	22.4	13.0	14.2	19.5	16.0
1,000 to 1,499	35.0	24.8	15.0	15.8	22.6	18.8
1,500 to 2,499	39.0	27.5	16.0	17.8	25.3	20.0
2,500 and over	43.8	30.8	18.0	20.4	30.8	24.8
Independent Two-Year:						
Under 250	17.0	14.0	9.2	10.5	11.8	11.5
250 to 499	22.7	17.8	9.3	11.0	15.8	13.9
500 to 999	27.3	19.6	11.6	12.6	17.7	14.8
1,000 and over	32.0	22.0	13.5	14.1	22.0	17.6

SOURCE: College and University Personnel Association, 1976-77 Administrative Compensation Survey.

TABLE VII

CHANGES IN QUALIFICATIONS, COMPETENCE, AND PERFORMANCE OF FACULTY, 1976-77 AND 1977-78, AS REPORTED BY CHIEF ACADEMIC OFFICER[1]

	Percentage of Reporting Institutions				
	Increase	No Change	Decrease	Don't Know	Total
Percentage of faculty with Ph.D. or equivalent:					
Research and Doctoral-Granting Universities	33%	47%	--	20%	100%
Comprehensive Universities and Colleges	69	24	7%	--	100
Liberal Arts Colleges I	35	65	--	--	100
Liberal Arts Colleges II	63	33	5	--	100
Two-Year Colleges	41	59	--	--	100
Five types of institutions combined	54	41	3	1	100
General competence of new additions to the faculty as compared with previous additions:					
Research and Doctoral-Granting Universities	60	20	--	21	100
Comprehensive Universities and Colleges	58	42	--	--	100
Liberal Arts Colleges I	30	70	--	--	100
Liberal Arts Colleges II	69	26	5	--	100
Two-Year Colleges	53	47	--	--	100
Five types of institutions combined	59	38	2	1	100
Willingness of faculty to innovate:					
Research and Doctoral-Granting Universities	27	47	--	26	100
Comprehensive Universities and Colleges	35	58	--	7	100
Liberal Arts Colleges I	20	65	15	--	100
Liberal Arts Colleges II	49	42	9	--	100
Two-Year Colleges	59	35	6	--	100
Five types of institutions combined	44	46	8	2	100
General quality of faculty performance:					
Research and Doctoral-Granting Universities	34	46	--	20	100
Comprehensive Universities and Colleges	45	51	--	4	100
Liberal Arts Colleges I	15	85	--	--	100
Liberal Arts Colleges II	64	36	--	--	100
Two-Year Colleges	--	--	--	--	---
Five types of institutions combined	51	46	1	1	100

TABLE VII (Continued)

	Percentage of Reporting Institutions				
	Increase	No Change	Decrease	Don't Know	Total
Concern for teaching:					
Research and Doctoral-Granting Universities	28%	39%	--	23%	100%
Comprehensive Universities and Colleges	39	57	--	4	100
Liberal Arts Colleges I	15	85	--	--	100
Liberal Arts Colleges II	45	55	--	--	100
Two-Year Colleges	47	53	--	--	100
Five types of institutions combined	40	58	--	2	100
Concern for advising students:					
Research and Doctoral-Granting Universities	34	46	--	20	100
Comprehensive Universities and Colleges	42	48	4%	5	100
Liberal Arts Colleges I	35	60	4	--	100
Liberal Arts Colleges II	54	46	--	--	100
Two-Year Colleges	59	41	--	--	100
Five types of institutions combined	50	47	2	--	100
Productivity in research and scholarship:					
Research and Doctoral-Granting Universities	40	39	--	20	100
Comprehensive Universities and Colleges	41	53	--	5	100
Liberal Arts Colleges I	35	65	--	--	100
Liberal Arts Colleges II	34	62	--	4	100
Two-Year Colleges	18	82	--	--	100
Five types of institutions combined	32	64	2	1	100
Loyalty and commitment to institution:					
Research and Doctoral-Granting Universities	--	66	6	27	100
Comprehensive Universities and Colleges	31	58	3	7	100
Liberal Arts Colleges I	5	90	5	--	100
Liberal Arts Colleges II	37	52	10	--	100
Two-Year Colleges	24	53	24	--	100
Five types of institutions combined	28	59	11	2	100

[1]Based on responses from 108 of 135 institutions.

TABLE VIII

CHANGES IN GENERAL ACADEMIC PREPARATION OF STUDENTS ADMITTED, 1976-77 AND 1977-78, AS REPORTED BY CHIEF ACADEMIC OFFICERS[1]

	Percentage of Reporting Institutions				
	Increase	No Change	Decrease	Don't Know	Total
Reading skills:					
Research and Doctoral-Granting Universities	20%	47%	20%	14%	100%
Comprehensive Universities and Colleges	3	69	28	--	100
Liberal Arts Colleges I	--	60	35	3	100
Liberal Arts Colleges II	6	60	30	5	100
Two-Year Colleges	12	35	53	--	100
Five types of institutions combined	6	56	34	3	100
Writing skills:					
Research and Doctoral-Granting Universities	13	60	20	7	100
Comprehensive Universities and Colleges	3	65	31	1	100
Liberal Arts Colleges I	5	50	40	5	100
Liberal Arts Colleges II	1	55	39	5	100
Two-Year Colleges	12	35	53	--	100
Five types of institutions combined	4	52	40	3	100
Mathematical skills:					
Research and Doctoral-Granting Universities	27	47	13	14	100
Comprehensive Universities and Colleges	14	65	18	3	100
Liberal Arts Colleges I	5	65	25	5	100
Liberal Arts Colleges II	6	61	29	5	100
Two-Year Colleges	12	41	47	--	100
Five types of institutions combined	9	57	30	4	100

TABLE VIII (Continued)

	Percentage of Reporting Institutions				
	Increase	No Change	Decrease	Don't Know	Total
Humanistic and social studies preparation:					
Research and Doctoral-Granting Universities	19%	60%	13%	7%	100%
Comprehensive Universities and Colleges	3	69	21	6	100
Liberal Arts Colleges I	--	75	20	5	100
Liberal Arts Colleges II	9	63	14	14	100
Two-Year Colleges	18	47	24	12	100
Five types of institutions combined	9	62	18	11	100
Science preparation:					
Research and Doctoral-Granting Universities	20	47	20	14	100
Comprehensive Universities and Colleges	14	69	14	3	100
Liberal Arts Colleges I	--	85	10	5	100
Liberal Arts Colleges II	6	57	28	9	100
Two-Year Colleges	--	--	--	--	---
Five types of institutions combined	10	63	20	6	100

[1]Based on responses from 108 of 135 institutions.

TABLE IX

CHANGES IN STUDENT ACHIEVEMENT AND INTERESTS, BY TYPES OF INSTITUTIONS, 1976-77 AND 1977-78, AS REPORTED BY CHIEF ACADEMIC OFFICERS[1]

	Percentage of Reporting Institutions				
	Increase	No Change	Decrease	Don't Know	Total
Conscientious work:					
Research and Doctoral-Granting Universities	33%	53%	--	13%	100%
Comprehensive Universities and Colleges	50	46	--	4	100
Liberal Arts Colleges I	45	55	--	--	100
Liberal Arts Colleges II	21	60	14%	5	100
Two-Year Colleges	29	47	24	--	100
Five types of institutions combined	31	54	11	3	100
General academic achievement:					
Research and Doctoral-Granting Universities	34	60	--	7	100
Comprehensive Universities and Colleges	37	52	3	7	100
Liberal Arts Colleges I	15	85	--	--	100
Liberal Arts Colleges II	6	85	5	5	100
Two-Year Colleges	24	65	12	--	100
Five types of institutions combined	16	75	5	3	100
Participation in extracurricular activities:					
Research and Doctoral-Granting Universities	27	53	--	21	100
Comprehensive Universities and Colleges	21	69	3	7	100
Liberal Arts Colleges I	25	65	10	--	100
Liberal Arts Colleges II	37	58	--	5	100
Two-Year Colleges	41	35	24	--	100
Five types of institutions combined	10	53	27	10	100
Interest in contemporary public affairs:					
Research and Doctoral-Granting Universities	6	40	40	14	100
Comprehensive Universities and Colleges	18	54	21	7	100
Liberal Arts Colleges I	--	55	45	--	100
Liberal Arts Colleges II	10	56	23	11	100
Two-Year Colleges	12	47	24	18	100
Five types of institutions combined	10	53	27	10	100

TABLE IX (Continued)

	Percentage of Reporting Institutions				
	Increase	No Change	Decrease	Don't Know	Total
Political activism:					
Research and Doctoral-Granting Universities	--	6%	80%	14%	100%
Comprehensive Universities and Colleges	4%	47	42	7	100
Liberal Arts Colleges I	--	50	50	--	100
Liberal Arts Colleges II	6	32	58	4	100
Two-Year Colleges	--	47	35	18	100
Five types of institutions combined	3	38	51	7	100
Loyalty to institution:					
Research and Doctoral-Granting Universities	14	79	--	7	100
Comprehensive Universities and Colleges	21	71	4	4	100
Liberal Arts Colleges I	25	70	--	5	100
Liberal Arts Colleges II	30	51	5	14	100
Two-Year Colleges	29	71	--	--	100
Five types of institutions combined	27	62	3	8	100
Orientation toward careers:					
Research and Doctoral-Granting Universities	93	--	--	7	100
Comprehensive Universities and Colleges	81	15	--	4	100
Liberal Arts Colleges I	80	20	--	--	100
Liberal Arts Colleges II	80	10	5	5	100
Two-Year Colleges	76	24	--	--	100
Five types of institutions combined	80	14	2	3	100
Orientation toward liberal learning:					
Research and Doctoral-Granting Universities	7	27	53	14	100
Comprehensive Universities and Colleges	10	39	44	7	100
Liberal Arts Colleges I	10	65	25	--	100
Liberal Arts Colleges II	5	66	24	--	100
Two-Year Colleges	6	41	53	--	100
Five types of institutions combined	7	55	34	4	100

TABLE IX (Continued)

	Percentage of Reporting Institutions				
	Increase	No Change	Decrease	Don't Know	Total
Grade and credential consciousness:					
Research and Doctoral-Granting Universities	60%	27%	6%	7%	100%
Comprehensive Universities and Colleges	65	31	--	4	100
Liberal Arts Colleges I	40	60	--	--	100
Liberal Arts Colleges II	61	35	--	5	100
Two-Year Colleges	29	59	12	--	100
Five types of institutions combined	53	42	3	3	100

[1]Based on responses from 108 of 135 institutions.

TABLE X

TRENDS IN METHODS OF INSTRUCTION, 1976-77 TO 1977-78,
AS REPORTED BY CHIEF ACADEMIC OFFICER[1]

	Percentage of Reporting Institutions				
	Increase	No Change	Decrease	Don't Know	Total
Percentage of classes taught by regular full-time members of the faculty (as distinct from teaching assistants, adjunct faculty, and other part-time faculty):					
Research and Doctoral-Granting Universities	13%	57%	19%	11%	100%
Comprehensive Universities and Colleges	11	76	10	3	100
Liberal Arts Colleges I	10	75	15	--	100
Liberal Arts Colleges II	28	50	17	5	100
Two-Year Colleges	18	59	24	--	100
Five types of institutions combined	21	59	17	4	100
Average class size:					
Research and Doctoral-Granting Universities	27	59	7	7	100
Comprehensive Universities and Colleges	17	83	--	--	100
Liberal Arts Colleges I	20	75	5	--	100
Liberal Arts Colleges II	23	48	24	5	100
Two-Year Colleges	29	65	6	--	100
Five types of institutions combined	23	60	16	--	100
Rigor in assessing student performance:					
Research and Doctoral-Granting Universities	54	33	6	7	100
Comprehensive Universities and Colleges	34	53	13	--	100
Liberal Arts Colleges I	30	65	5	--	100
Liberal Arts Colleges II	37	58	5	--	100
Two-Year Colleges	35	65	--	--	100
Five types of institutions combined	36	58	5	--	100

TABLE X (Continued)

	Percentage of Reporting Institutions				
	Increase	No Change	Decrease	Don't Know	Total
Rigor of academic standards:					
Research and Doctoral-Granting Universities	40%	53%	--	7%	100%
Comprehensive Universities and Colleges	33	64	3%	--	100
Liberal Arts Colleges I	25	70	5	--	100
Liberal Arts Colleges II	39	56	5	--	100
Two-Year Colleges	29	71	--	--	100
Five types of institutions combined	35	62	3	--	100
Overall quality of learning environment:					
Research and Doctoral-Granting Universities	60	27	--	14	100
Comprehensive Universities and Colleges	48	48	3	--	100
Liberal Arts Colleges I	30	65	5	--	100
Liberal Arts Colleges II	59	27	9	5	100
Two-Year Colleges	47	53	--	--	100
Five types of institutions combined	51	40	6	3	100
Amount of laboratory-studio instruction (vs. lecture-discussion):					
Research and Doctoral-Granting Universities	14	79	--	7	100
Comprehensive Universities and Colleges	14	83	3	--	100
Liberal Arts Colleges I	15	85	--	--	100
Liberal Arts Colleges II	27	73	--	--	100
Two-Year Colleges	29	71	--	--	100
Five types of institutions combined	23	76	--	--	100
Innovative teaching methods such as audio-visual, computer-assisted, modular systems, personalized instruction:					
Research and Doctoral-Granting Universities	60	34	--	7	100
Comprehensive Universities and Colleges	54	43	3	--	100
Liberal Arts Colleges I	30	70	--	--	100
Liberal Arts Colleges II	64	36	--	--	100
Two-Year Colleges	59	41	--	--	100
Five types of institutions combined	57	42	--	--	100

TABLE X (Continued)

	Percentage of Reporting Institutions				
	Increase	No Change	Decrease	Don't Know	Total
Traditional independent study such as research projects, reading courses, senior thesis, etc.:					
Research and Doctoral-Granting Universities	21%	66%	6%	7%	100%
Comprehensive Universities and Colleges	22	72	6	--	100
Liberal Arts Colleges I	--	95	5	--	100
Liberal Arts Colleges II	43	57	--	--	100
Two-Year Colleges	12	82	--	6	100
Five types of institutions combined	27	69	2	2	100
Non-traditional independent study such as credit by examination, experiential learning, extended degree programs:					
Research and Doctoral-Granting Universities	19	60	6	14	100
Comprehensive Universities and Colleges	41	59	--	--	100
Liberal Arts Colleges I	15	80	5	--	100
Liberal Arts Colleges II	68	32	--	--	100
Two-Year Colleges	24	71	6	--	100
Five types of institutions combined	47	51	2	--	100
Experiential learning programs such as combined work-study, clinical training, internship:					
Research and Doctoral-Granting Universities	33	46	7	14	100
Comprehensive Universities and Colleges	53	47	--	--	100
Liberal Arts Colleges I	45	55	--	--	100
Liberal Arts Colleges II	67	32	--	--	100
Two-Year Colleges	59	35	--	6	100
Five types of institutions combined	59	38	1	1	100

[1]Based on responses from 108 of 135 institutions.

TABLE XI

SELECTED ASPECTS OF STUDENT FINANCIAL AID BY PROGRAMS, MEDIAN INSTITUTIONS, 1975-76 AND 1976-77, RESEARCH AND DOCTORAL-GRANTING UNIVERSITIES

	% Change in Total Dollars 1975-6/1976-7	% of E&G Expenditures 1976-77	Recipients as % of Head Count 1976-77	% Change in Recipients 1975-6/1976-7	Average Award per Recipient 1976-77	% Change in Average Award 1975-6/1976-7	Avg. Award as % of Avg. Student Budget 1976-77
Total Financial Assistance[1]	18%	14%	30%[2]	-3	$ 2,842	11%	44%
Institutional Sources:							
1. Endowment, gifts	8	1	11	4	960	4	18
2. Unrestricted general funds	14	2	NR	NR	NR	NR	NR
3. Student payroll	6	1	10	10	680	2	15
4. Institution loans	8	*	1	*	742	0	11
5. FISL/GSL from institution funds	16	1	1	17	1,652	0	27
All institutional sources[3]	12	5	40[4]	9	730	4	12
State Sources:							
6. Local state	18	*	6	8	1,000	-1	16
7. Other states	14	*	1	3	633	-1	11
All state sources	18	*	6	12	956	-1	14
Federal Sources:							
8. BEOG	63	1	6	62	895	-1	15
9. SEOG	10	*	2	20	784	4	14
10. LEEP	-6	*	1	-1	778	-12	18
11. College work study[5]	21	1	6	16	715	12	13
12. NDSL[6]	12	2	10	6	975	5	17
All federal sources[7]	33	4	28	24	844	8	15
All other grants	15	1	2	-23	1,020	7	17

[1]All funds: grants, loans, and work from all sources known to the institutions.

TABLE XI (Continued)

[2]Unduplicated recipients.

[3]Includes lines 1, 2, 3, 4, 5, 20 percent of line 11, 11 percent of line 12.

[4]Percentage of recipients receiving aid in any form from this source.

[5]Includes 20 percent institutional share.

[6]Includes 11 percent institutional matching funds.

[7]Includes lines 8, 9, 10, 80 percent of line 11, 89 percent of line 12.

*Between 0.1 and 0.5 percent.

TABLE XII

SELECTED ASPECTS OF STUDENT FINANCIAL AID BY PROGRAMS, MEDIAN INSTITUTIONS, 1975-76 AND 1976-77, COMPREHENSIVE UNIVERSITIES AND COLLEGES

	% Change in Total Dollars 1975-6/1976-7	% of E&G Expenditures 1976-77	Recipients as % of Head Count 1976-77	% Change in Recipients 1975-6/1976-7	Average Award per Recipient 1976-77	% Change in Average Award 1975-6/1976-7	Avg. Award as % of Avg. Student Budget 1976-77
Total Financial Assistance[1]	14%	22%	36%[2]	14	$ 1,676	2%	38%
Institutional Sources:							
1. Endowment, gifts	11	2	6	4	699	10	16
2. Unrestricted general funds	6	5	15	4	1,045	*	19
3. Student payroll	9	2	9	6	496	1	11
4. Institution loans	-9	*	1	-4	781	-1	18
5. FISL/GSL from institution funds	11	4	5	0	1,272	1	31
All institutional sources[3]	7	10	60[4]	3	495	2	10
State Sources:							
6. Local state	7	4	10	6	874	1	17
7. Other states	2	*	1	7	594	-5	12
All state sources	7	4	11	7	870	1	17
Federal Sources:							
8. BEOG	65	4	11	64	906	1	18
9. SEOG	-1	1	4	2	639	-1	14
10. LEEP	-5	*	1	-4	683	-1	13
11. College work study[5]	4	1	9	-1	576	2	12
12. NDSL[6]	1	3	14	1	702	4	16
All federal sources[7]	20	9	36	15	683	6	14
All other grants	11	1	3	-3	899	10	15

For footnotes, see table XI.

TABLE XIII

SELECTED ASPECTS OF STUDENT FINANCIAL AID BY PROGRAMS, MEDIAN INSTITUTIONS, 1975-76 AND 1976-77, LIBERAL ARTS COLLEGES I

	% Change in Total Dollars 1975-6/1976-7	% of E&G Expenditures 1976-77	Recipients as % of Head Count 1976-77	% Change in Recipients 1975-6/1976-7	Average Award per Recipient 1976-77	% Change in Average Award 1975-6/1976-7	Avg. Award as % of Avg. Student Budget 1976-77
Total Financial Assistance[1]	6%	21%	49%[2]	3%	$ 2,309	5%	46%
Institutional Sources:							
1. Endowment, gifts	8	5	24	8	950	-2	18
2. Unrestricted general funds	-15	4	19	-10	1,269	6	23
3. Student payroll	10	2	23	7	302	9	6
4. Institution loans	- 3	*	2	- 9	732	11	13
5. FISL/GSL from institution funds	30	1	9	28	962	4	18
All institutional sources[3]	6	12	96[4]	4	564	-1	11
State Sources:							
6. Local state	10	2	11	5	900	3	15
7. Other states	- 3	*	1	0	645	-1	11
All state Sources	10	2	12	5	816	1	14
Federal Sources:							
8. BEOG	50	2	10	53	886	-1	16
9. SEOG	2	1	5	24	694	-5	14
10. LEEP	--	--	--	--	---	--	--
11. College work study[5]	6	1	13	8	397	4	7
12. NDSL[6]	- 3	2	12	-1	758	*	15
All federal sources[7]	18	6	40	15	617	1	12
All other grants	3	1	4	*	1,080	*	20

For footnotes, see table XI.

TABLE XIV

SELECTED ASPECTS OF STUDENT FINANCIAL AID BY PROGRAMS, MEDIAN INSTITUTIONS, 1975-76 AND 1976-77, LIBERAL ARTS COLLEGES II

	% Change in Total Dollars 1975-6/1976-7	% of E&G Expenditures 1976-77	Recipients as % of Head Count 1976-77	% Change in Recipients 1975-6/1976-7	Average Award per Recipient 1976-77	% Change in Average Award 1975-6/1976-7	Avg. Award as % of Avg. Student Budget 1976-77
Total Financial Asistance[1]	14%	36%	70%[2]	- 3%	$ 1,889	12%	47%
Institutional Sources:							
1. Endowment, gifts	4	3	8	- 1	627	4	17
2. Unrestricted general funds	4	4	27	5	474	5	8
3. Student payroll	5	2	12	0	486	11	14
4. Institution loans	*	3	6	-10	1,247	11	29
5. FISL/GSL from institution funds	-4	*	*	- 4	750	22	15
All institutional sources[3]	14	27	100[4]	14	723	*	18
State Sources:							
6. Local state	9	6	26	8	835	-1	18
7. Other states	23	*	1	42	600	-2	14
All state sources	12	5	23	11	758	-2	16
Federal Sources:							
8. BEOG	46	6	23	50	895	*	23
9. SEOG	1	2	14	2	550	1	13
10. LEEP	--	--	--	--	---	--	--
11. College work study[5]	12	3	22	5	498	4	13
12. NDSL[6]	4	4	20	4	702	2	17
All federal sources[7]	20	16	75	16	695	1	16
All Other Grants	-14	1	4	- 9	724	3	19

For footnotes, see table XI.

TABLE XV

SELECTED ASPECTS OF STUDENT FINANCIAL AID BY PROGRAMS, MEDIAN INSTITUTIONS, 1975-76 AND 1976-77, TWO-YEAR COLLEGES

	% Change in Total Dollars 1975-6/1976-7	% of E&G Expenditures 1976-77	Recipients as % of Head Count 1976-77	% Change in Recipients 1975-6/1976-7	Average Award per Recipient 1976-77	% Change in Average Award 1975-6/1976-7	Avg. Award as % of Avg. Student Budget 1976-77
Total Financial Assistance[1]	12%	34%	47%[2]	7%	$ 1,550	7%	38%
Institutional Sources:							
1. Endowment, gifts	12	5	42	11	462	0	15
2. Unrestricted general funds	27	4	--	14	393	16	--
3. Student payroll	5	2	13	2	333	10	11
4. Institution loans	31	7	10	20	502	-3	13
5. FISL/GSL from institution funds	96	3	--	--	1,305	8	--
All institutional sources[3]	16	9	100[4]	12	231	7	6
State Sources:							
6. Local state	0	3	7	0	514	3	17
7. Other states	--	--	--	--	---	--	--
All state sources	0	3	7	1	507	1	17
Federal Sources:							
8. BEOG	12	29	29	13	870	1	28
9. SEOG	9	2	7	8	429	3	14
10. LEEP	--	--	--	--	---	--	--
11. College work study[5]	12	4	16	3	399	2	11
12. NDSL[6]	11	4	12	3	586	3	12
All federal sources[7]	15	19	67	11	628	4	20
All Other Grants	0	*	4	0	637	-1	13

For footnotes, see table XI.

APPENDIX B

DEFINITIONS OF FINANCIAL TERMS

I. COMPARISON OF OLD AND NEW CLASSIFICATIONS: CURRENT FUND REVENUE, EXPENDITURES, AND MANDATORY TRANSFERS

Both the 1975 Industry Guide, "Audits of Colleges and Universities," and the Accounting Principles Committee of the National Association of College and University Business Officers (NACUBO) have recommended the following changes in classifications of expenditures of current funds. These changes have been made retroactive to 1974 Current Funds.

Prior Classification	NACUBO Classification
Instruction and Department Research	1. Instruction and Department Research Includes basically the same items except that it excludes computing services, demonstration schools, and course and curriculum development.
Sponsored Research and Sponsored Programs	2. Research Includes only expenditures related to research. Sponsored programs not related to research are excluded and are now included in their related areas; e.g. academic support, instruction and departmental research, or student services.
	3. Public Service Public service expenditures not related to instruction are included in this category. Prior to the NACUBO change of classification, these expenditures were found under "other."
Libraries	4. Academic Support Includes prior classification of "Libraries" but also includes academic deans, demonstration schools, audio/visual services, computing support, and course and curriculum development. Prior to this changeover these expenditures were usually found under "Instruction and Department Research" or "Sponsored Programs."
Student Services	5. Student Services Basically this expenditure classification remains the same except that sponsored programs relating to student services are now included here.

General Administration	6. Institutional Support Combines both General Administration and General Institutional Support categories. One exception is that the Academic Dean is now included under Academic Support rather than General Institutional Support.
Operation and Maintenance of Plant	7. Operation and Maintenance of Plant Category remains unchanged.
Student Aid	8. Scholarships and Fellowships Includes the prior category of "Student Aid." The main distinction is that the College Work Study Program expenditures are not shown here but in the areas where the student is employed. Both prior and present classifications excluded the BEOG and ROTC grants but included the SEOG.
Other	Prior classification "Other" is not shown under NACUBO classifications. "Other" expenditures are now shown under "Institutional Support."

Athletics: For Universities and Comprehensive Universities and Colleges, athletics revenues and expenditures are included with "Auxiliary Enterprises." For Liberal Arts Colleges I and II and Two-Year Colleges, athletics revenues are included with sales and services of educational departments. Athletics expenditures are included with "Student Services."

II. CURRENT FUND CODING DEFINITIONS

"Unrestricted" current fund revenues include all unrestricted gifts, grants, and other unrestricted resources earned during the reporting period.

"Restricted" current fund revenues include all gifts, grants, and other resources restricted by external donors or grantors expended for current operating purposes.

A. REVENUES

Student Tuition and Fees. All tuition and fees assessed against students for current operating purposes, tuition, and fee remission or exemptions even though no money is collected from the student. Charges for room, board, and other services rendered auxiliary enterprises are not included.

State Government Revenue. All monies received from state sources, but excluding student aid awarded to individual students by the state. Such awards are included in student tuition and fees.

Federal and Local Government Revenue. All amounts received from federal and local governments including campus-based student aid programs.

Gifts and Private Grants Revenue Applied. This category includes all gifts and private grants (including gifts for student-aid) received from nongovernmental organizations and individuals. Unrestricted gifts, grants, and bequests include all those received during the current year. Restricted gifts, grants, and bequests include all those actually expended during the current year, including funds given in prior years which are now being expended.

This mixture of funds clouds the interpretation of the item unless a detailed analysis can be made of nonmandatory transfers to determine what funds may have been tapped for current operating expense.

Endowment Income. Income from endowment and similar funds which should be the total ordinary income earned (or yield) except for income that must be added back to the principal in accordance with the terms of the donation.

Sales and Services of Educational Departments. All revenues from sales and services of educational departments and from organized activities related to them.

Contributed Services. Estimated revenues of contributed services; e.g., salaries of administrators and teachers affiliated with religious orders.

Other Revenue. Included here are gains and losses from current fund investments, expired term endowment, matured annuity and life income funds, miscellaneous rentals and sales and all other sources of revenue not included in above classifications.

Educational and General Revenues. The sum of the previous items, often referred to as Educational and General Revenue because of its direct relation of the educational, research, and public service activities of the institution.

Auxiliary Enterprises. Usually includes residence halls, food services, college unions, college stores, and such services as barber shops, beauty parlors, and movie theaters.

Hospitals Revenue. This category includes all revenues generated by hospitals from patient, special, and other services.

Independent Operations Revenue. Included here are all revenues of those operations which are independent of, or unrelated to, but which may enhance the primary missions of the institution--instruction, research, or public service (e.g., major federally funded research laboratories).

Total Revenue. The sum of all of the above.

B. EXPENDITURES

Instruction and Departmental Research. Included are all expenses of instructional divisions of the institution, including credit and non-credit courses, for academic, vocational and occupational instruction, and for regular, special and extension sessions. Not included are expenses for academic administration when administration is the primary assignment, separately budgeted research or public service, and remedial and tutorial instruction.

Research. All expenditures for activities specifically organized to produce research outcomes, both those sponsored by external agencies and separately budgeted research programs of the institution. This category does not include sponsored teaching programs, or sponsored non-research programs.

Academic Support. Included are all funds expended to provide support services for the institution's primary missions--instruction, research, and public service. The five major categories included are:

(1) Libraries, museums, and galleries
(2) Demonstration schools
(3) Audio-visual services and academic computing support
(4) Academic administration (including academic deans, but not department chairmen)
(5) Course and curriculum development

Student Services. Expenditures for such activities as admissions, financial aid administration, student activities, counseling, guidance and testing, dean of students services, and health services not operated as auxiliary enterprises (as a university hospital would be).

Institutional Support. Expenditures included in this category are general executive and administrative office expenses; e.g., governing board, president's office, fiscal operations, administrative data processing, space management, employees personnel, logistical support, public relations, alumni relations, and development and fund raising. Staff benefits are shown with salary expenditures in the appropriate expenditure categories and are not shown as Institutional Support expenditures.

Operation and Maintenance of Plant. All expenses for the general operation and maintenance of the physical plant, including property insurance.

Scholarships and Fellowships. Included here are scholarships and fellowships, trainee stipends, prizes and awards. Supplemental Educational Opportunity Grants (SEOG) are included here, but when the institution is not allowed to select the recipient of a grant; e.g., state scholarships, BEOGs and ROTC scholarships, the funds should not be included in total charges. When financial aid is exchanged for student work; e.g., college work-study program, the expense is charged to the unit for which the work is done.

Mandatory Transfers: Principal and Interest. Debt service transfers fixed by binding legal agreements.

Mandatory Transfers: Renewal and Replacement. Included here are all mandatory transfers for renewal and replacement required from educational and general expenditures.

Mandatory Transfers: Matching Grants. Included here are all mandatory transfers for matching grants required from educational and general expenditures.

Mandatory Transfers: Loan Fund. Required matching funds for governmental and private grants.

Educational and General Expenditures. The sum of the above.

Auxiliary Enterprises: Expenditures. All expenses of auxiliary enterprises as well as their proportionate share of costs for physical plant maintenance and operation and general administration. Included here are mandatory transfers for principal and interest, and renewal and replacement required from auxiliary enterprises.

Hospitals Expenditures. This category includes all expenditures and transfers associated with patient care operations, including nursing and other professional services, general services, and administrative services of the hospitals.

Independent Operations Expenditures. All expenditures of independent operations are included here.

Total Expenditures and Mandatory Transfers. Subtotal of Educational and General Expenditures and Total Auxiliary Enterprises.

III. BALANCE SHEET CODING DEFINITIONS

A. ASSETS

Unrestricted Current Assets. All financial resources that are expendable for any purpose in running the institution: cash, short term investments, accounts and notes receivable, prepaid expenses, inventories, and funds internally restricted by governing boards.

Restricted Current Assets. Funds expendable for current operations, but restricted by outside sources such as donors or agencies such as foundations. Gifts, grants, appropriations, endowment income.

Total Current Assets. Unrestricted and restricted current assets combined.

Loans. All loan funds available to students, faculty, or staff. NDSL loans, college loan funds. Assets include cash, notes receivable, and short term investments.

Endowments. All endowment, term endowment, and quasi-endowment funds. Book, not market, value is used. Assets include cash, investments, and real estate.

Annuity and Life. Funds required to pay stipulated amounts periodically to designated individuals. Assets include cash, investments, and securities.

Unexpended Plant. All assets of the plant fund except those invested in institutional properties. Assets include unexpended funds, renewal and replacement, debt service, and funds set aside for retirement of indebtedness.

Invested in Plant. Includes all physical plant properties, e.g., land, buildings, equipment, library books, and construction in progress without adjustments for appreciation and depreciation.

Total Plant. Total plant assets at undepreciated book value.

Agency. Funds held by the institution as custodian for other groups, e.g., student organizations. Federal current funds are considered current restricted, and NDSL funds are considered loan funds--not agency funds.

Total Assets. Total of all assets including interfund borrowing.

Interfund Borrowing. Total of all internal loans, both short term and long term internal investments.

Net Assets. Total of assets minus interfund borrowing.

B. LIABILITIES

Unrestricted Current Liabilities. Includes accounts and notes payable, accrued liabilities, students' deposits, deferred revenues, and amounts due internally to other funds.

Restricted Current Liabilities. Includes accounts and notes payable, refunds due grantors, interfund borrowing.

Plant Liabilities. Includes accounts and notes payable, bonds, notes and mortgages payable, and interfund borrowing, including long-term investments of endowment funds.

Other Liabilities. Loan liabilities are amounts due collection agencies, interfund borrowing. Government grants refundable are not treated as loan liabilities. Endowment liabilities include investment liabilities, mortgage notes payable (on real estate investments), and internal liabilities. Annuities and life liabilities are payable payments currently due but not based on life expectancy tables, and interfund borrowing. Agency liabilities are funds considered liabilities since the institution is only the custodian of these funds.

Total Liabilities. Total of all fund liabilities.

C. FUND BALANCES (All fund balances represent the difference between the assets and the liabilities of that fund.)

Unrestricted Current Fund Balances. Difference between assets and liabilities.

Restricted Current Fund Balances. Difference between assets and liabilities.

Loan Fund Balances. Government grant fund balances and institution loan fund balances.

Endowment Fund Balances. Difference between assets and liabilities.

Annuities and Life Fund Balances. Difference between assets and liabilities.

Plant Fund Balances. Difference between assets and liabilities.

Total Fund Balances. Total of all fund balances.

APPENDIX C

INSTITUTIONAL FINANCIAL POSITION AND METHODOLOGY IN THE APPRAISAL OF PROGRESS

INSTITUTIONAL FINANCIAL POSITION AND METHODOLOGY IN THE APPRAISAL OF PROGRESS

Relative Measurement

Each college has a unique pattern of assets and operations which have been reduced to uniform sets of financial statistics. No absolute judgment can be made whether a particular financial pattern is good or bad outside of its specific historical and current situation. Different patterns work for different colleges. What can be done, however, is to observe the financial position and progress of each college relative to the average position and progress of a reference group. If an institution's general financial performance is superior to the group average, it seems reasonable to infer that, relative to the reference group, its financial risk position is improving. If, on the other hand, its performance is substantially below the group average, the college would appear to be moving toward greater risk as a going concern.

Financial Positions

General financial position of an institution is determined in this study by five indicators:

1. Net assets (total assets less interfund borrowing), a measure of resources available to the institution.

2. Total revenue, a measure of the level of financial activity.

3. Endowment funds balance, a measure of income producing capital and financial reserve.

4. Total asset coverage of total liabilities (total assets divided by total liabilities), a measure of financial risk as well as equity.

5. Current ratio (total current assets divided by total current liabilities), a measure of the ability to pay off current debts if called. Also a clue to trends in working capital and cash flow.

Calculating the institution's general financial position based on the composite of these five elements is done in the following manner:

Step 1: The institution's relative position on each element is determined by applying the formula $z = \frac{x - \bar{x}}{SD}$. For example, the average net assets figure for the group is subtracted from the institution's net figure. The result is divided by the standard deviation for the distribution

of all net assets. The resulting z score is a measure of the institution's distance from the group average net assets in terms of standard deviation units. If the score is 0 or near 0, the institution's position is near the average. If the score is positive number of 1 or greater, its position is one standard deviation or greater above the average (higher than 84% of the total group). If it is a negative number it is below the group average position. A z score of -1 would indicate a position lower than 89% of the group.

Step 2: The z scores of these five elements are averaged to arrive at the composite position score.

Financial Progress

The general financial progress of an institution is calculated in a similar manner using the change in the following statistics as measures:

1. Change in total asset coverage of total liabilities (a measure of changing equity).
2. Change in current ratio (changing ability to pay off current debt).
3. Change in net revenue ratio (changing the balance between total revenues and total expenditures).
4. Change in endowment funds balance (changing level of reserves).
5. Change in total revenues (changing level of current financial resources).
6. Change in enrollment (changing level of student choice, independent of tuition and fees which may also reflect change in tuition charges).

The composite progress score is calculated in three steps:

Step 1: Individual z scores calculated for the three-year change in the first seven indicators, then averaged.

Step 2: z scores calculated for the current year change in all six indicators, then averaged.

Step 3: The three-year and one-year z scores are averaged. The consequence is to give additional weight to the current year's performance. A final z score is calculated for the distribution of the 3 + 1 year weight average.